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<400> 672

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atacacantg gacnntctg ccaggcaant tatgcgcaca gccatgaagn ataacctggg 120
ttingacctg agaacagctt cctatgntaa tgccattgng aangtcttca aagtgtacan 180
tgaagctggt gtgaccttca catngatgga ncatggtgga cttnncnact atcctcttca 240
catgtaactt ntgcagacct atcanaagtt tacatgtaac cacagnnntc cctttctctn 300
ctgactnatt aataatgggt accattctta acangttaat ccaagtncag cncgtttaag 360
ggngnaaagg antcaagggt nggcgggttc atntncaagn tgcgtgtggn agtagtaatt 420
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<211> 431

<212> DNA

<213> Homo sapiens

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 agtactgcgg cctcctctcc tctcctaacc tcgctctcgc ggcctagctt tacccgcccc 180  
 cctgctcggc gaccagaaca ccttccacca tgaccacctc agcaagtcc cacttaaata 240  
 aaggcatcaa gcaggtgtac atgtccctgc ctcagggtga gaaagtccag gccatgtata 300  
 tctggatcga tggtaactgga gaaggactgc gctgcaagac ccggaccctg gacagtgagc 360  
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 anggttccag t 431

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aaggcgaggt agccctctgt tgattggtgt acggagtga cataaacttt ctactgatca 180
cattcctata ctctacagaa caggcaaaga caagaaagga agctgcaatc tctctcgngt 240
ggacagcaca acctgccttn tcccggngga agaaaaagca gnggagtatt actttgcttc 300
tgatgcaann gctgcataga acacaccaat cgcgtcatct ttctggaaga tgatgatgtn 360
gcagcaagna                                     370
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<211> 363

<212> DNA

<213> Homo sapiens

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cagtncccttc aagcctacaa gccccgagag aatgatgant tggcactgga gaaagccgac 120  
gtggtgatgg tgactcacca gagcagtga cggtcggtg gagggcgta ggctctcaga 180  
cggggagcga ggctgggttc ctgtgacagc nntgngagtt catttccaac ccagaggtcc 240  
gtgacacaga acctgaaggg aagcttcac gagtgcaaga cttgccaac tacagctngt 300  
gggaacagca agcctnantt ttctnctgna gaaggagttt tcgtgagctg gaagaacaag 360  
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<210> 676  
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<212> DNA

<213> Homo sapiens

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<400> 676

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agaatctggt aaaagcacca ttgtgaagca gatgaggatc ctgcatgtta atgggtttaa 180
tggagacagt gagaaggcaa ccaaagtgcg gganatcaaa aacaacctga aagaggcgat 240
tgaaaccatt gtggccgcca tgagcaacct ggtgcccccc gtggagctgg ccaaccccga 300
aaaccagttc agagtggact acatcctgag tgtgatgaac gtgcctgact ttnacttccc 360
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<210> 677

<211> 550

<212> DNA

<213> Homo sapiens



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gggagcgcaa cgtgtctatc ttgacctg ggcggggcac cttcgacgtg tccatcctga 180  
cgatcgacga cggcatcttc gaggtgaagg ccacggncgg ggacacccac ctgggtgggg 240  
aggactttga caacaggctg gtgaaccact tcgtggagga gttcaagaga aaacacaaga 300  
aggacatcag ccagaacaag cgagccgtga ggcggctgcg caccgctgcg agagggccaa 360  
gaggaccctg tcgtccagca cccaggccag cctggagatc gacttccttg ttttgagggc 420  
atcgacttnt acacgttcat caccagggcg aaggttcgaa ggagctgtgc ttccgacctt 480  
gntnccnaaa caccctggg aaccccgtag gaaaaaaggc ttnttgccgc gaaaggccca 540  
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atggaggata tggntacac tggttacaac aactactatg gatatggtga ttatagcaac 180  
cagcagagtg gttatgggaa ggtatccagg cgagggtggtc atcaaaatag ctacaaacca 240  
tacttaaatt attccatttg caacttatcc ccaacagggtg gtgaagcata ttttncatt 300  
tgaaggttcc tttgaggggg gctccgccc gncttaatt ggcnttccaa cttaaattttt 360  
gggtatccag tcccnatgg gagtntgcgg tggggccccc nggagtttaa ttcgggggtcc 420  
ccntaaagga tttnn 435

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tggctttggc tggggacacc cgaccacgtt tcttgagca ggtnaaacat gaatgtcatt 180  
tcttcaacgg gacggaacgg gtgcgggtcc tggacanata cttctatcac caagaagaat 240  
acgtgcgctt cgacagcgac gtgggggaat accgggcggt gacgganctg gggcggccta 300  
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<212> DNA  
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nnaatatcta tncctcgcgat gatatcagaa gatatctncn ctatgcaaga aagtntaaac 180
ccaagaattc caaagantca gnggacttca ttgtggagca atntaaacat ctccgcccgn 240
aagatggggtt ctggagtagc ccagtcttca tngagggnth cagttgcggc cncattgagg 300
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<211> 523

<212> DNA

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natcttccgt gacactnttg anggnacgcc cgcaggtacc cggtcggaa ttcccgggtc 60

gacccacgcg tncgccaat tttaccaatc tatcaccta tagaagagct aatgttagta 120  
taagtaacat gaaaacattc ncctccgcat aagcctgcgt cagattaaaa cactgaactg 180  
acaattaaca gcccaatata tacaatcaac caacaagtca ttattaccct cactgtcaac 240  
ccaacacagg catgctcata aggaaagggt aaaaaaagta aaaggaactc ggcaaattctt 300  
accccgccctg tttacaaaaa acatcacctc tagcatcacc agtattagag gcaccgcctg 360  
cccagtgaca catgtttaac ggncgcggta ccctaaccgt gcaaaggtag cataatcact 420  
tggtccttaa ttagggacct gnatgaatgg ctccacgagg gtcagctggc tcttactttt 480  
aaccagngaa attgacctgn cgngaagagg cggnatgaca cag 523

<210> 682

<211> 713

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (423)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (595)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (605)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (626)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (633)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (640)

<223> n equals a,t,g, or c

<220>

<221> misc feature



615

&lt;222&gt; (646)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (660)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 682

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gggtcaaccca acacaggcat gctcataagg aaagggttaaa aaaagtaaaa ggaactcggc 60
aaatcttacc cgcctgttt accaaaaaca tcacctctag catcaccagt attagaggca 120
ccgcctgccc agtgacacat gtttaacggc cgcggtaccc taaccgtgca aaggtagcat 180
aatcacttgt tccttaaata gggacctgta tgaatggctc cacgagggtt cagctgtctc 240
ttacttttaa ccagtgaat tgacctgccc gtgaagaggc gggcatgaca cagcaagacg 300
agaagaccct atggagcttt aatttattaa tgcaaacagt acctaacaaa cccacaggtc 360
ctaaactacc aaacctgcat taaaaatttc gggtggggcg acctcgggagc agaaccacaac 420
ctncgagcag tacatgctaa gacttcacca gtcaaagcga actactatac tcaattgatc 480
caataacttg accaacggaa caagttaccc tagggataac agcgcaatcc tattctagag 540
tccatataca caataggggtt tacgaacctc gatgtttgat cangacattc ccatngtgca 600
gcccnctaft taaaagggttc gttggnacac gantaaaggc cctacntgaa ctgagttcan 660
aaccggagta aattccaagg cgggttttta tctaccttaa aattcccccc tgg 713

```

&lt;210&gt; 683

&lt;211&gt; 289

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (6)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (15)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (28)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (73)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (80)

&lt;223&gt; n equals a,t,g, or c

<220>  
<221> misc feature  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (240)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (252)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (287)  
<223> n equals a,t,g, or c

<400> 683  
tccccntact-aaanggaaca aaagctgnag ctccaccgcg gtggcgggccg ctctagaact 60  
agtggatccc ccnggctgcn tgaattcggc acgagcggca cgaggccctg cgggggtgtac 120  
acccccggtt gcggtcggg cctgctctgc taccgcgccg gaggggtgga gaagccctg 180  
cacacactga tgcacgggca aggcgtgtgc atggagctgg cgganacga ggccatncan 240  
gaaagcctgc anccctctga caaggacgag ggtgaccacc ccaacanca 289

<210> 684  
<211> 464  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (4)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (353)  
<223> n equals a,t,g, or c

<400> 684  
ggangagccc agccctggga ttttcaggtg gtttcatttg gtgaacagga ctgaacagag 60  
agaactcacc atggaatttg ggctgagctg gctttttctt gtggctattt taaaagggtg 120

ccagtgtgag gtgcaattgg tggagtctgg gggaggcttg gtacagcctg gggggtcct 180  
gagactctcc tgtacagtct ctggattcac ctttcgcaac tatgccatga gttgggtccg 240  
ccagggtcca ggggaaggggc tggaatgggt ctcagcaatt gacggtagtg gttataacac 300  
atactacgag aggtccctgc agggccgctt tagtgtctcc agagacaatt ccnagaacac 360  
actatatctg caaatgaaca gcctgggagc cgaggacacg gccatctatt attgtgcgaa 420  
gacagaacgt atgggtactg gctggtacgg acgaaatgac tact 464

<210> 685

<211> 545

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (16)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (326)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (428)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (438)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (442)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (456)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (457)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (505)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (509)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (536)

<223> n equals a,t,g, or c

<400> 685

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aggtagccggc ccggaattcc cgggtcgacc cacgcgtccg gaccgtcacc cctggagaga 120
cggcctccat ctctgcagg tctagtcaga ccctcctgca tgtcaatgga cacaactatt 180
tggattggta catgcagaag ccagggcagc ctccacagct cgtgggtctat aggggttcca 240
atcgggcctc cggggtccct gacaggttca gtggcggttg atcaggcaca gattttacac 300
ttagaatcac cacggtggag gctgangatg ttggcggtta ttactgcatg caagctctac 360
aaagtccgta cacttttggc caggggacca agctggagat caaacgaact gtgggctgca 420
ccatctgnct tcatcttncc gncatctgat gaacanntga aatctggaac tgcctctggt 480
gggggcctgc tgaataactt ctatnccana gagggccaaa gtaccagtgg aaaggnggga 540
taacg 545
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<210> 686

<211> 496

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (358)

<223> n equals a,t,g, or c

<220>

<221> misc feature:

<222> (417)

<223> n equals a,t,g, or c

<220>

<221> misc feature:

<222> (460)

<223> n equals a,t,g, or c

<220>

<221> misc feature:

<222> (472)

<223> n equals a,t,g, or c

<220>

<221> misc feature:

<222> (481)

<223> n equals a,t,g, or c

<220>

<221> misc feature:

<222> (488)

<223> n equals a,t,g, or c

<400> 686

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ctactaaaagg gaacaaaagc tggagctcca ccgcggtggc ggccgctcta gaactagtgg 60
atccccccggg ctgcaggaat tcggcacgag cggctggggc ctgaggatca gccgcttcct 120
gcctggattc cacagcttcg cgccgtgtac tgcgccccca tccctgcgcg cccagcctgc 180
caagcagcgt gcccgggttg caggcgatcat gcagcggggc cgaccacgc tctgggcccgc 240
tgcgctgact ctgctggtgc tgctccgcgg gccgcgggtg gcgcgggctg gcgcgagctc 300
ggggggcctt ggtcccgttg tgcgctgcga accgtgcgac gcgcgtgcac tggcccantg 360
cgcgcccttc gcccgcggtg tgcgcccga cttggtgcgc caagccgggc ttgcggntgc 420
tgcctgacgt gcgcactgag cgaagggcca gccgtgcggn atctacaccg ancgtgtgg 480
ntccggnct tcgttg 496
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<210> 687

<211> 476

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature:

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature:

<222> (7)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (56)

<223> n equals a,t,g, or c

<400> 687

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gcncganacn aaccctcact aaaggggaaca aaagctggag ctccaccgcg gtgcgncgcg 60
tctagaacta gtggatcccc cgggctgcag gaattcggca cgagattgat gacaccaata 120
tcacacgact gcagctggag acagagatcg aggctctcaa ggaggagctg ctcttcatga 180
agaagaacca cgaagaggaa gtaaaaggcc tacaagccca gattgccagc tctgggttga 240
ccgtggaggt agatgcccc aaatctcagg acctcgccaa gatcatggca gacatccggg 300
cccaatatga cgagctggct cggaagaacc gagaggagct agacaagtac tggctcagc 360
agattgagga gagcaccaca gtggtcacca cacagtctgc tgaggttgga gctgctgaga 420
cgacgctcac agagctgaga cgtacagtcc agtccttggg gatcgacctg ggactt 476

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<210> 688

<211> 483

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<400> 688

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anantaaccc tactaaagg gaacaaaagc tggagctcca ccgcggtgcg gccgctctag 60
aactagtgga tccccgggc tgcaggaatt cggcacgagc aggttcccgc ccggaagaag 120
cgaccaaagc gcctgaggac cggcaacatg gtgcggtcgg ggaataaggc agctggtgtg 180
ctgtgtatgg acgtgggctt taccatgagt aactccattc ctggtataga atccccattt 240
gaacaagcaa agaaggtgat aaccatgttt gtacagcgac aggtgtttgc tgagaacaag 300
gatgagattg ctttagtcct gtttggtaca gatggcactg acaatcccct ttctgggtggg 360
gatcagtatc agaacatcac agtgcacaga catctgatgc taccagattt tgatttgctg 420
gaggacattg aaaagcaaaa tccaaccagg ttctcaacag gctgacttcc tgggatgcac 480
taa 483

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<210> 689

<211> 339

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (109)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (135)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (155)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (236)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (260)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (280)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (289)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (337)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (338)

<223> n equals a,t,g, or c

<400> 689

aggcaggagg aagccgatcg aaaactcaga gaggaggaag agaagaggag gctaaaggaa 60  
gagattgaaa ggcgaggagc agaagctgct gagaaacgcc agaagatgnc agaagatggc 120  
ttgtcagatg acagnaaacc attcaagtgt ttcantccta aaaggttcat ctcttcaaga 180

tagaagagcg agcagatttt tgattaagtc tgtgcagaaa agcagtgggtg ttcaantcga 240  
cccttcaagc agcattagtn ttccaagttt gacagcagan tggagcatnt taccatggca 300  
tttgagggga ccaaaagcag ccaaaacctt aaaaaanna 339

<210> 690

<211> 594

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c



<220>

<221> misc feature

<222> (55)

<223> n equals a,t,g, or c

<400> 691

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ganganacna accctcacta aaggggaacaa aagctggagc tccaccgagg tgcgnccgct 60
ctagaactag tggatccccc gggctgcagg aattcggcac gagcgcatga ctttgtcttc 120
tccgcacgac tggtacagag gtctccagag ccttctctct cctgtgcaaa atggcaactc 180
ttaaggaaaa actcattgca ccagttgcgg aagaagaggc aacagttcca aacaataaga 240
tcactgtagt ggggtgttga caagttggta tggcgtgtgc tatcagcatt ctgggaaagt 300
ctctggctga tgaacttgct cttgtggatg ttttgggaaga taagcttaaa ggagaaatga 360
tggatctgca gcatggggagc ttatttcttc agacacctaa aattttggca gataaagatt 420
attctgtgac cgccaattct aagattgtag tggtaactgc aggagtccgt cagcaagaag 480
gggagagtcg gctcaatctg gtgcagagaa atgttaatgt cttcaaattc attattcc 538
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<210> 692

<211> 201

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (125)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (143)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (161)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (165)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (183)

<223> n equals a,t,g, or c

<400> 692

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gctcattgcc acgcgcccc gacgaccgcc cgacgtgcat tcccgattcc ttttggttcc 60
aagtccaata tggcaactct aaaggatcag ctgatttata atcttctaaa ggaagaacag 120
accnccaga ataagattac agntgttggg gttggtgctg ntggnatggc ctgtgccatc 180
aanatcttaa tgaaggactt g 201
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<210> 693  
<211> 589  
<212> DNA  
<213> Homo sapiens

<220>  
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<223> n equals a,t,g, or c

<220>  
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<222> (2)  
<223> n equals a,t,g, or c

<220>  
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<222> (23)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (271)  
<223> n equals a,t,g, or c

<220>  
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<222> (312)  
<223> n equals a,t,g, or c

<220>  
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<222> (342)  
<223> n equals a,t,g, or c

<220>  
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<222> (354)  
<223> n equals a,t,g, or c

<220>  
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<222> (377)  
<223> n equals a,t,g, or c

<220>  
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<222> (401)  
<223> n equals a,t,g, or c

<220>  
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 <222> (424)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (437)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (466)  
 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <222> (572)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (576)  
 <223> n equals a,t,g, or c

<400> 693  
 nncaaaaagt acctaggtga cantatagaa ggtacgcctg caggtaccgg tccggaattc 60  
 ccgggggttg taacttggtt attgcagctt ataatggta caaataaagc aatagcatca 120  
 caaatctcac aaataaagca tttttttcac tgcattctag ttgtgggttg tccaaactca 180  
 tcaatgtatc ttatcatgtc tggatcgatc ctgcattaat gaacggccaa cgcgcgggga 240  
 gaggcgggtt gcgtattggc tggcgtaata ncgaaaagcc cgcaccgatc gcccttccca 300  
 acagttgcgc ancctgaatg gcgaatggga cgcgcctgt ancggcgcat taancgcggc 360  
 ggggtgtggtg gttaccncaa cgtgaccgct acacttgcca ncgccctaac gcccgctcct 420  
 ttncctttct tcccctncct ttctccccc cgttcgcgcg ggtttncccc gtcaaactct 480  
 aaatccgggg ntccccttta agggttccca atttaattgc ttaacggcac ctccaacccc 540  
 aaaaaaactt naataagggg tgaatgggtc nnctanttgg gccaccccc 589

<210> 694  
<211> 386  
<212> DNA  
<213> Homo sapiens  
  
<220>  
<221> misc feature  
<222> (59)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (135)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (149)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (173)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (202)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (204)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (244)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (326)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (340)  
<223> n equals a,t,g, or c

627

<220>  
<221> misc feature  
<222> (369)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (370)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (383)  
<223> n equals a,t,g, or c

<400> 694  
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gagatctgcc ctgccggcca cggctacacc tacgcgagct ccgacatccg cctgtccatg 120  
aggaaagccg aggangaaga actggcaang cccccaaggg agcaagggca gangagcagc 180  
tgggcactgc ccgggccaac ananaagcag cccctccggg ttcgtcacgg acacctggct 240  
tgangccggg accatccctg acaagggtga ctctcaagct ggccagggtca cgaccagtgt 300  
cactcatgca cctgcctggg tcacanggaa atgccacaan cccacccaat gcctgaacag 360  
ggaattgcnh aaaattccgg aanaaa 386

<210> 695  
<211> 475  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (231)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (278)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (423)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (459)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

&lt;222&gt; (463)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (465)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (466)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 695

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ggttcacagc atatattggt ggattcttgt ccatagtgca tctgctttaa gaattaacga 60
aagcagtgtc aagacagtaa ggattcaaac catttgccaa aaatgagtct aagtgcattt 120
actctcttcc tggcattgat tggtggtacc agtggccagt actatgatta tgattttccc 180
ctatcaattt atgggcaatc atcaccaaac tgtgcaccag aatgtaactg ncctgaaagc 240
taaccaagtg ccatgtactg tgatgagctg aaattganaa gtgtaccaat ggtgcctcct 300
ggaatcaagt atctttacct taggaataac cagattgacc atattgatga aaaggccttt 360
gagaatgtaa ctgatctgca gtggctcatt ctagatcaca accttctaga aaactccaag 420
atnaaaggga gagttttctc taaattgaaa caactgaana agntnntata accac 475

```

&lt;210&gt; 696

&lt;211&gt; 444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (402)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (410)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 696

```

tatcaagtgt actccaaaat ccaggcaaca aacacatggc tgtttctaag tagctgtaac 60
ggaaatgaaa cttctctttg ggactgcaag aactggcaat ggggtggact tacctgtgat 120
cactatgaag aagccaaaat tacctgctca gccacaggg aaccagact ggttgaggg 180
gacattccct gttctggacg tgttgaagtg aagcatggtg acacgtgggg ctccatctgt 240
gattcagact tctctctgga agctgccagc gttctatgca ggaattaca gtgtggcaca 300
gttgctctta tcctgggggg agctcacttt ggagagggaa tggacagatc tgggctgaag 360
aattccagtg ttgagggaca tgaatcccca tctttcatct tncagtagn aacccgccc 420
aaaagggaact tgtagccaca gcaa 444

```

&lt;210&gt; 697

&lt;211&gt; 411

&lt;212&gt; DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (104)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (305)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (338)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (370)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (375)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (391)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (410)

<223> n equals a,t,g, or c

<400> 697

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aacatggcgg gtgtggagga ggtagcggcc tccgggagcc acctgaatgg cgacctggat 60
ccagacgaca gggaagaagg agctgcctct acggctgagg aaanagccaa gaaaaaaaga 120
cgaaagaaga agaagagcaa agggccttct gcaggtaaag agagttttat gttttcccag 180
tcccctccgg gaacggctga actgtttggc tcaggcccggt tgaggggggcc gggaccgggg 240
ccccagagcc ccgactagac tgattcttgg gcctgacagg gtggcaaagc cgggctatag 300
atcanggtgc acctgagctt tctctgatgt atgccangc agatctccag gtattcagag 360
cacctgcttn cccancctgt tagtcttagt nacccaaccc tcctgtgcan a 411
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<210> 698

<211> 135

<212> DNA

<213> Homo sapiens

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<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c

<400> 698:
ggcgtgggtt tccgggaggg nacctgnggg gccagaccc agcgcacccg gtgnaggggtg 60
ccctncaact ggaagatgna tttcgagccg atttcaagta caaagtttta gaacttgggg 120
tgcgtgtgat taggg-
<210> 699
<211> 434
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c

<220>

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<221> misc feature  
 <222> (56)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (61)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (321)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
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 <223> n equals a,t,g, or c

<220>  
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 <222> (369)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (391)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (394)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (427)  
 <223> n equals a,t,g, or c

<400> 699  
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 ngcacagtgt tctctcttgg agcatgcatg gaaggcctga atattttgct taacagactg 120  
 ttgggggattt cattatatgc agagcagcct gcaaaaggag aggtgtggag cgaagatgtc 180  
 cgaaaactgg ctgttgttca tgaatctgaa ggattgttgg ggtacattta ctgtgatttt 240  
 tttcagcgag cagacaaacc acatcaggat tgccatttca ctatccgtgg aggcagacta 300  
 aaaggaagat gggagactat ncaactccca gttgtaagtt cttatgctgg aatcttcccc 360  
 gttcccgtna gggagtctc caactttggc naangcctgg gcatgatggg aaaacctttc 420  
 ccagganggg ggac 434

<210> 700

<211> 435

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<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (118)
<223> n equals a,t,g, or c

<400> 700
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cagatgagac cgggtgccag ggtactggct cctcatctca ctcgggctta tgccaaanat 120
gtaaaatttg gtgcagatgc ccgagcctta atgcttcaag gtgtagacct tttagccgat 180
gctgtggccg ttacaatggg gccaaaggga agaacagtga ttattgagca gagttgggga 240
agtcccaaag taacaaaaga tgggtgtgact gttgcaaagt caattgactt aaaagataaa 300
tacaagaaca ttggagctaa acttgttcaa gatgttgcca ataacacaaa tgaagaagct 360
ggggatggca ctaccactgc tactgtactg gcacgctcta tagccaagga aggcttcgag 420
aagattagca aaggt                                     435

<210> 701
<211> 406
<212> DNA
<213> Homo sapiens

<400> 701
aaaatttggg gcagatgccc gagccttaat gcttcaaggt gtagaccttt tagccgatgc 60
tgtggccggtt acaatggggc caaagggaag aacagtgatt attgagcaga gttggggaag 120
tcccaaagta acaaaagatg gtgtgactgt tgcaaagtca attgacttaa aagataaata 180
caagaacatt ggagctaaac ttgttcaaga tgttgccaat aacacaaatg aagaagctgg 240
ggatggcact accactgcta ctgtactggc acgctctata gccaaaggaag gcttcgagaa 300
gattagcaaa ggtgctaata cagtggaaat caggagaggt gtgatgttag ctgttgatgc 360
tgtaattgct gaacttaaaa agcagtctaa acctgtgacc acccct                                     406

<210> 702
<211> 266
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (203)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (215)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (230)
<223> n equals a,t,g, or c

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<220>  
<221> misc feature  
<222> (239)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (252)  
<223> n equals a,t,g, or c

<400> 702  
tgtgagttca agcgggtgcc gcagtgtccc agcgggaggg tctacgtgct gaagttcaag 60  
gcagggtcca agcgggtttt cttctggatg caggaaacca agacagacca ggatgaggag 120  
cattgccgga aagtcaacga gttatctgga acaaccccccc gatgcctggg gcaactggggg 180  
ccagcgggaac agcggccacg aantctctgc gctangcggt tgaggtggcn tgcagagcnt 240  
gctgggggaaa cntgagccac agccag 266

<210> 703  
<211> 244  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (194)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (207)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (208)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (211)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (216)  
<223> n equals a,t,g, or c

<400> 703  
tacctacgcc taatctactc cacctcaatc acactactcc ccatatctaa caacgtaaaa 60  
ataaaatgac agtttgaaca tacaaaaccc accccattcc tccccacact catcgccctt 120

accacgctac tcctacctat ctcccccttt atactaataa tcttataaaa aaaaaaaaaa 180  
aaaaaaaaaa aaangggggg gccgggnncc natttngccc aaagggggg ggttttaaaa 240  
ttca 244

<210> 704

<211> 462

<212> DNA

<213> Homo sapiens...

<220>

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<222> (7)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (102)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (162)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (168)

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<221> misc feature

<222> (183)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (186)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (189)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (206)  
<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<222> (294)  
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<223> n equals a,t,g, or c

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<222> (339)

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 <221> misc feature  
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 <223> n equals a,t,g, or c  
 <220>  
 <221> misc feature  
 <222> (347)  
 <223> n equals a,t,g, or c  
 <220>  
 <221> misc feature  
 <222> (356)  
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 <220>  
 <221> misc feature  
 <222> (358)  
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 <221> misc feature  
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 <221> misc feature  
 <222> (443)  
 <223> n equals a,t,g, or c  
 <400> 704  
 gtaagancta agtgaccctc ggctgctgc ggggatctgc agcgnactgc agccatgggg 60  
 gccacactgg tccggcgcta cctgggcgat gcctcgggtg ancccgaccc cctgcagatg 120  
 ccaaccttcc cgccagaacta cggcttcccc gaacgcaagg ancgcganat ggtggccaca 180

```

cancangana tgatggacgc gcactnaagc tccanctgcg ggantactgc gcccaccaac 240
tcatccgggt gctcaattnc aaccttaaan cttcccccac ttccttggct tgcnaaccag 300
gaacgggaca aatnggaata ntncacaaaca cccanaant tttnttnccc ttaaanantt 360
tttaaacgga aacgaagggt ntcccccccg gaaaaaaaaac nggggnaaaa aaaggggaaa 420
tttttttnccc cccccccgcc cgnnggaaatt ttcccccccg tt 462

```

&lt;210&gt; 705

&lt;211&gt; 436

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 705

```

gaagggtcagc gccgtaatgg cgttcttggc gtcgggaccc tacctgaccc atcagcaaaa 60
ggtggttgagg ctttataagc gggcgctacg ccacctcgag tcgtgggtgcg tccagagaga 120
caaataccga tactttgctt gtttgatgag agcccggttt gaagaacata agaatgaaaa 180
ggatatggcg aaggccaccc agctgctgaa ggaggccgag gaagaattct ggtaccgtca 240
gcatccacag ccatacatct tccctgactc tcctgggggc acctcctatg agagatacga 300
ttgctacaag gtcccagaat ggtgcttaga tgactggcat ccttctgaga aggcaatgta 360
tcctgattac ttgccaaga gagaacagtg gaagaaactg cgggagggaa agctgggaac 420
gagagggttaa gcagct 436

```

&lt;210&gt; 706

&lt;211&gt; 487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (26)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (34)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (45)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (51)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (63)

&lt;223&gt; n equals a,t,g, or c

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<222> (190)  
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<222> (202)  
<223> n equals a,t,g, or c

<220>



<221> misc feature  
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<222> (279)  
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<220>  
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<222> (289)  
<223> n equals a,t,g, or c

<220>  
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<222> (293)  
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<222> (378)  
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<220>  
<221> misc feature  
<222> (384)  
<223> n equals a,t,g, or c

<220>  
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<222> (404)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (442)  
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<220>  
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 <222> (453)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (467)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (483)  
 <223> n equals a,t,g, or c

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 gccagaagaa cactgctgct cttggnggac gggncagag gaatncagag ntaaacccttg 60  
 agngcctgcg tncgtgagaa ttcagcatgg aatgactcta ctatttctg ggatttctgn 120  
 tncgtgntgn aagattgccca cttgatgccg ccaaacgatt ncatgatgag ctgggnaatg 180  
 aaagaccttn tgcttacatg anggagcaca atcaattaaa tggctggnt tctgatgaaa 240  
 atgactggaa tgaaaaactc taccagtggt ggaagcggng agacatgang tngaaaaaac 300  
 tgctggaagg gagggccgtg tgcaaggcgg tcctgaccag ngactnacca acccttggng 360  
 ggctcaaata naacattngc cgngaacct gatattccct aaangccaaa aggaagaagc 420  
 caatggcaac ataggctatg anaagaactg ganaaatgaa gctgggntaa acagctgaac 480  
 canaagg 487

<210> 707  
 <211> 414  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (178)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (214)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature

<222> (219)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (365)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (368)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (382)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (402)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (408)  
<223> n equals a,t,g, or c

<400> 707  
ggttgtttctc tggagcagcg ttctttttatc tccgtccgcc ttctctccta cctaagtgcg 60  
tgccgccacc cgatggaaga ttgatggac atggacatga gccccctgag gccccagaac 120  
tatcttttctg gttgtgaact aaaggccgac aaagattatc actttaaggt ggataatnat 180  
gaaaatgagc accagttatc ttttaagaacg gtcngtttng gggctgggtgc aaaggatgag 240  
ttgcacattg ttgaagcaga ggcaatgaat tacgaaggca gtccaattaa agtaacactg 300  
gcaactttga aaatgtctgt acagccaacg gttttccctc tgggggcttt gaataacacc 360  
accanggncc ttaaggttga antgtggttc agggccatgc cnattagngg acag 414

<210> 708  
<211> 360  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (287)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (335)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (343)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (352)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (355)  
<223> n equals a,t,g, or c

<400> 708  
gaaaagccat ctttgcatg ttcctcatcc gcctccttgc tcgccgcagc cgcctccgcc 60  
gcgcgcctcc tccgccgcc cggactccgg cagctttatc gccagagtcc ctgaactctc 120  
gctttctttt taatcccctg catcggatca ccggcggtgcc ccaccatgtc agacgcagcc 180  
gtagacacca gctccgaaat caccaccaag gacttaaagg agaagaagga agttgtggaa 240  
gaggcagaaa tggaagagac gccctgctaa cgggatgcta atgaggnaat ggggagcagg 300  
aggtagcatg aggtagccga gaagaggaag aagtngggag aanagagaga anaanaagtt 360

<210> 709  
<211> 253  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (9)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (17)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (30)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (72)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (80)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (110)  
 <223> n equals a,t,g, or c

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 ggcccacccat ccggcgngg accttttccg ttagcgtggg tgatattgtt cctgctcgag 180  
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 ngaggaaatt cnc 253

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caatgatgct tttaagggaa tgactagtga agaaaaagaa attctgatac gggacaaaaa 120
tgctcttcaa aacatcattc tttatcacct acaccaggag ttttcattgg aaaaggattt 180
gaacctggtg ttactaacat ttttaaagac cacacaaggn agcaaaatct ttctggaagg 240
aagtgaaatg gttacacttc tggatgaatg atttggaat ccaaaagant ctgacatcca 300
tggncacca anggtggtaa tttcatgttg taggttaaac tncncttttc cagcagncac 360
accttttggg natggntcaa ctggtnggga tacttgatta tttnatncaa tnnccctccn 420
atttaaggtt ttttcggggg tgggcccctt caaggggaatn ccngggctnt tttttnacac 480
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496

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tgcccagtggt atcttgggatg ctgctttcct gcctcatgct gctgtctcag gttcaagggtg 180
aagaaccccca gaggggaactg ccctctgcac ggatccgctg ncccaaaggc tccaaggcct 240
atggctcccca ctgctatgcc ttgtttttgt caccaaaatc ctggacagat gcagatctgg 300
cctgccagaa gcggccctct ggaaacctgg tgtctgngct cagtgggggt gagggatcct 360
tcgngcctcc ctggtgaaga gcattggtaa cagctactca tacgtctgga ttgggctcca 420
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 tggctcggg gacctccgca gcagctcccc agggcccacg ggccagcccc gccgccctcg 180  
 caacctggca gccgccgccc tggaagagca gtatagctgt gactatggat ctggcagatt 240  
 ctttatcctt tgtggacttg gaggaattat tagctgtggc acaacacata cagcattggt 300  
 tcctctagat ctggttaaata gcagangcag gtttggtttt gcatgctgga cttagagcna 360  
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 gatgaacgtc tccggaaaga gttttctcca ttgtgtacaa tcaactagtgc aaaggttatg 180  
 atggagggtg gtcgcagcaa aggggttggt tttgtatgtt tctcctcccc agaanaagcc 240  
 actaaagcag ttacanaaat gaacggtaga attgtggcca caaagccatt gtatgtagct 300  
 ttagctcagc gcaaagaaga ggcgcaggct cacctcacta accagtatat gcagagaatg 360  
 gcaagtgtac ganctgttcc caaccctgta atcaaccctt accagccagc acctccttca 420  
 ggttacttca tggcagctat cccacagact cagaacgtgc tgcatactat cctcctagcc 480  
 aaattgctca actaanacca agtcctcgct ggactgctca gggtgccata actcatccat 540  
 tccaaaatat gcccggtgct atccgcccag ctgtctctan aacaccattt agtactatga 600  
 naacagcttc ttctcagcaa catcttaatg cacagccaca anttacaatg cacancctgc 660  
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 aaacaaaacc aatt 734

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<220>  
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650

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 gtttttaaac aaagtgactg aggcacagga agatggccag tcaacttctg aattgattgg 180  
 ccagtttggt gtcggtttct attccgcctt ccttgtagca gataaggta ttgtcacttc 240  
 aaaacacaaac aacgataccc agcacatctg ggagtctgac tccaatgaat tttctgtaat 300  
 tgctgaccca agaggaaaca ctctaggacg gggaacgaca attacccttg tcttaaaaga 360  
 agaagcatct gattaccttg aattggatac aattaaaaat ctctcaaaa aatattcaca 420

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 cagccctcat ctctcgaggt gttatcggaa ccacatttga gggacgcgct atttacctcc 180  
 tgaaggttg caaagctgga caaaataagc ctgccatttt catggactgt gggtttccca 240  
 tgccaganan ttggatttct ccctgcattc ngccagtnng tttntaaaa aangcgggtc 300  
 ccttcctatn gacntttana ncccanttga caaacttcnc caacaattta aanttttatn 360  
 ttcccgccct gtggcccaa tattgaaggg caacttcnac cccgggaacn aaaacccaat 420  
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 caaaaaaatt t 491

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<220>  
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gctacccgggt gtgcggcagc gacggcacca cctacccgag cggctgccag ctgcgcgccg 120  
ccagccagag ggccgagagc cgcggggaga aggccatcac ccaggtcagc aagggcacct 180  
gcgagcaagg tccttccata gtgacgcccc ccaaggacat ctggaatgtc actggtgccc 240  
angtgtactt gagctgtgag gtcacgga tcccgcacacc tgctctcatc tggaacaagg 300  
tanaaagggg tcactatgga nntcanagga c 331

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gtgagcggtg gtggtttatt cttccgtgga gttaagggct ccgtggacat ctcaggtctt 180
cagggctctt catctggaac tatataaagt tcagaaaaca tgtctcgaga tatgactcca 240
ggaccactat attttctcca gaaggtcgct tataccaagt tgaatatgcc atggaagcta 300
ttggacatgc aggcacctgt ttgggaattt tagcaaatga tgggtgtttg cttgcagcag 360
agagacgcaa catccacaag cttcttgatg aagtcttttt ttctgaaaaa atttataaac 420
tcaatgagga catggcttgc agtgtggcag gcataacttt ctgatgctaa tgttctgact 480
aatgac 486
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<210> 718

<211> 479

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (436)

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<400> 718

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acgagcgtgt atgagagccc ctacagcgac ccagaggagc tcaaggacaa gaagctcttc 180  
ctgaagcgcg ataacctcct catagctgac attgaacttg gctgcggcaa ctttggtca 240  
gtgcgccagg gcgtgtaccg catgcgcaag aagcagatcg acgtggccat caaggtgctg 300  
aagcagggca cggagaaggc agacacggaa gagatgatgc gcgaggcgca gatcatgcac 360  
cagctggaca acccctacat cgtgcggctc attggcgtct gccaggccga agccctcatg 420  
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<210> 719

<211> 572

<212> DNA

<213> Homo sapiens

<220>

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<222> (418)

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<221> misc feature

<222> (421)

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<222> (503)

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<222> (526)

<223> n equals a,t,g, or c

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<222> (546)

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<222> (559)

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tttccagggga atgaagaagc tctcctacat ccgcattgct gataccaata tcaccagcat 180
tcctcaaggt cttcctcctt cccttacgga attacatctt gatggcaaca aaatcagcag 240
agttgatgca gctagcctga aaggactgaa taatttggtt aagttgggat tgagtttcaa 300
cagcatctct gctgttgaca atggctctct ggccaacacg cctcatctga gggagcttca 360
cttggacaac aacaagctta ccagagtacc tgggtgggctg cagagcataa agtacatnca 420
nggtggctac cttcataaca accatatctc tgtagttgga tcaaagtgac ttctggccac 480
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<210> 720

<211> 487. feature

<212> DNA

<213> Homo sapiens, . . .

<220>

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<222> (3)

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<220>

<221> misc feature

<222> (376)

<223> n equals a,t,g, or c

<220>

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tgtcagtgtg tagaggggttc tttggatgta gacacttttc aaagaccaat gagctgctgc 180  
agaagtctgg caagaagccc attgactgga aggagctgtg atcatcagct gaggggtggc 240  
ctttgagaag ctgctgttaa cgtatttgcc agttacgaag ttccactgaa aattttccta 300  
ttaattctta agtactctgc ataaggggga aaagcttcca gaaagcagcc atgaaccagg 360  
ctgtccagga atggancctg tatccaacca caaacaacaa aggctaccct ttgacccaaa 420  
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acttaat 487

<210> 721

<211> 464

<212> DNA

<213> Homo sapiens

<220>

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<222> (222)

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<220>

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<222> (349)

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<220>

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<222> (364)

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<220>

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<222> (415)

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<220>

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<222> (436)

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<222> (443)

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<222> (448)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (455)

<223> n equals a,t,g, or c

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gccgccgtct cccgcgtgct gtotggcgct tctcagaagc cggcaagcag agtgctggta 180
gcatcccgtg attttgcaa tgatgctaca tttgaaatta anaaatgtga ccttcaccgg 240
ctggaagaag ccctcctgtc acaacagtgc tcaccaaggg aagatgggct caaatactac 300
aggatgatgc anactgtacc cgaatggaat tgaaacagat cactgtntna acagaaaatt 360
atcntggttt ctgtccttgt gtgatgtcag aacttgctgt gtggcctgga gccgnatcac 420
cccaaact ctccanctac ggntccgntt attnccggg cttc 464

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<210> 722

<211> 320

<212> DNA

<213> Homo sapiens

<220>

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<220>

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<220>

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<220>

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<220>

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<222> (153)

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<222> (299)

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<220>

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<222> (308)

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<400> 722

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agtcggtcag cgccggatga cctcagcagc catgtcgaag ccccatagtg aanccgggac 120
tgcttcatt cagacccagc anctgcacgc annatggct gacacattcc tggagcacat 180
gngccgcctg gacattgatt caccacccat nacaggcccg aacactggca tcattctgtac 240
cattggccca gcttcccgat cangtggaga cggtnaagga natgattaaa gcctggaang 300
aatgtgntc gtctgaactt                                     320

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<210> 723

661

<211> 152  
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<213> Homo sapiens

<220>  
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<222> (79)  
<223> n equals a,t,g, or c

<220>  
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<222> (87)  
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<220>  
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<220>  
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<222> (127)  
<223> n equals a,t,g, or c

<220>  
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<222> (148)  
<223> n equals a,t,g, or c

<400> 723  
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gacctgcctc ctcacgtnt tcagcangga tcagtttccg gaggtctacg nccctactgt 120  
cctttgngaa ctatattgcg cacattgngg cg 152

<210> 724  
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<212> DNA  
<213> Homo sapiens

<220>  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
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<220>  
<221> misc feature

662

<222> (553)  
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<220>  
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<222> (559)  
<223> n equals a,t,g, or c

<220>  
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<222> (569)  
<223> n equals a,t,g, or c

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aaaattgcat ctgatggctt caagggctcg gtgtttgaag tgagtcttgc tgatttgacag 120  
aatgatgaag ttgcatttag aaaattcaag ctgattactg aagatgttca gggtaaaaaac 180  
tgacctgacta acttccatgg catggatctt acccgtgaca aaatgtgttc catgggtcaaa 240  
aaatggcaga caatgattga agctcacgtt gatgtcaaga ctaccgatgg ttacttgctt 300  
cgtctgttct gtgttggttt tactaaaaaa cgcaacaatc agatacggaa gacctcttat 360  
gctcagcacc aacaggtccg ccaaattccg aagaagatga tggaaatcat gacccgagag 420  
gtgcagacaa atgacttgaa agaagtggc aataaattga ttncagacgc attggaaaag 480  
acatagaaaa ggcttggcaa tctattatcc tctncatgat ggcttcgtta gaaaagtaaa 540  
aatgctgaag aanccaagnt tgaatgggna aac 573

<210> 725  
<211> 403  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (9)  
<223> n equals a,t,g, or c

<400> 725  
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tctagaacta gtggatcccc cgggctgcag gaattcggca cgagtcctgg tccgcgccag 120  
agcccagcgc gcctcgtcgc catgcctcgg aaaattgagg aaatcaagga cttcctgctc 180  
acagcccagac gaaaggatgc caaatctgtc aagatcaaga aaaataagga caacgtgaag 240  
tttaaagtgc gatgcagcag atacctttac accctgggtc tctactgacaa agagaaggca 300  
gagaaactga agcagtcctt gccccccggt ttggcagtga aggaactgaa atgaaccaga 360  
cacactgatt ggaactgtat tatattaaaa tactaaaaat cct 403

<210> 726  
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<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature



663

&lt;222&gt; (7)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (8)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (12)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (256)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (281)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (380)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (391)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (428)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (456)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 726

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cgcaagnnCG .anactaacc tcactaaagg gaacaaaagc tggagctcca ccgcggtgcg 60
gccgctctag aactagtgga tccccggggc tgcaggaatt cggcacgaga gccatcaggt 120
aagccaagat ggggtgcatac aagtacatcc aggagctatg gagaaagaag cagtctgatg 180
tcatgcgctt tcttctgagg gtccgctgct ggcagtaccg ccagctctct gctctccaca 240
gggctccccg ccccanccgg cctgataaag cgcgccgact nggctacaag gccaaagcaag 300
gttacgttat atataggatt cgtgttcgac gtgggtggccg aaaacgcca gttcctaagg 360
gtgcaattac ggcaagcctn tccatcatgg ngttaaccag ctaaagtgtg ctogaagcct 420

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664

tcagtccntt gcagaggagc gagctggacg ccactntggg gctctgagag tcctgaattc 480  
ttactggggtt ggtgaagatt cc 502

&lt;210&gt; 727

&lt;211&gt; 361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (17)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (309)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (318)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (360)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 727

ggcagcagcg aacgcgnaga gcacgccatg aaggcctcgg gcacgctacg agagtacaag 60  
gtagtgggtc gctgcctgcc ccccccaaa tgccacacgc cgccccctcta ccgcatgcga 120  
atctttgcgc ctaatcatgt cgtcgccaag tcccgcttct ggtactttgt atctcagtta 180  
aagaagatga agaagtcttc aggggagatt gtctactgtg ggcagggtgt tgagaagtcc 240  
cccctgcggg tgaagaactt cgggatctgg ctgcgctatg actcccgag cggcacccac 300  
aacatgtanc gggaataneg ggacctgacc aacgcaggcg ctgtcaacca gtgtaacggn 360  
g 361

&lt;210&gt; 728

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (6)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (200)

&lt;223&gt; n equals a,t,g, or c

665

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<220>  
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 <222> (251)  
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<220>  
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 <223> n equals a,t,g, or c

<220>  
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 gagaccaatg aaatcgccaa tgccaactcc cgtcagcaga tccggaagct catcaaagat 120  
 gggctgatca tccgcaagcc tgtgacggtc cattcccggg ctcgatgccg gaaaaacacc 180  
 ttggcccgcc ggaaaggcan gcacatgggc atagttagcg gaaagggtaca gccnatgcc 240  
 gaatgccaaa naagggtcaca tggattaaga aaatgaagat tttgcgcccc ctgctcaaaa 300  
 aatacgtgaa tcttaaaana tcgatcgcca cntntttcac agcctgttcc taaagttaan 360  
 ggaatttttt caaaaacaac cgattctcnt ggaacacttc c 401

<210> 729  
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 <212> DNA  
 <213> Homo sapiens

<220>

666

<221> misc feature  
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<220>  
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 <222> (10)  
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<220>  
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 <222> (14)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (60)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (527)  
 <223> n equals a,t,g, or c

<400> 729  
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 ccgctctaga actagtggat cccccgggct gcaggaattc ggcacgagcc gccatcttcc 120  
 agtaattcgc caaaatgacg aacacaaaagg gaaagaggag aggcacccga tatatgttct 180  
 ctaggccttt tagaaaacat ggagttgttc ctttgccac atatatgcga atctataaga 240  
 aaggtgatat tgtagacatc aagggaatgg gtactgttca aaaaggaatg cccacaagt 300  
 gttaccatgg caaaactgga agagtctaca atgttaccga gcatgctgtt ggcattgttg 360  
 taaacaaaca agttaagggc aagattcttg ccaagagaat taatgtgcgt attgagcaca 420  
 ttaagcactc taagagccga gatagcttcc tgaaacgtgt gaaggaaaat gatcagaaaa 480  
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<210> 730  
 <211> 375  
 <212> DNA  
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<220>

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<220>  
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<220>  
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<222> (322)  
<223> n equals a,t,g, or c

<220>  
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<222> (333)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (354)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (367)

<223> n equals a,t,g, or c

<400> 730

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tggaacgctac tccggacgca aagctgntca tcgtaanaga acattgaatg ntggcacctc 120
naanngccccc tacagccatg cnctgggtggc tgggaattga accgctaccc ccgcaaata 180
ncngctgccn tggggcanga agaagntcgc caggagggtca aagatatant cttttgtgaa 240
ngtgtgtnac tacaatcacc tnatgccnc aaggtactct gtgngatatt ccccttgggg 300
caaagctgta cgttcattag gntgtcttcc ganattcctg gctcttaaac gctnggcccg 360
aaggagnccc aggtc 375
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<210> 731

<211> 207

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (143)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (177)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (187)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (201)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (207)

<223> n equals a,t,g, or c

670

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actgctccag tttcctgata aagaggaata agcagacctc cagcactgag cccaataact 120  
tgaaggcccg caattccttc cgntacaacg gactgattca ccgcaagact gtgggcntgg 180  
agccggnagc cgacggcaaa ngtgtcn 207

<210> 732  
<211> 702  
<212> DNA  
<213> Homo sapiens

<220>  
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<223> n equals a,t,g, or c

<220>  
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<222> (620)  
<223> n equals a,t,g, or c

<220>  
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<222> (628)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (655)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (686)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (690)  
<223> n equals a,t,g, or c

<400> 732  
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gaagtggtaa cccgagaata caccatcaac attcacaagc gcatccatgg agtgggcttc 120  
aagaagcgtg cacctcgggc actcaaagag attcggaaat ttgccatgaa ggagatggga 180  
actccagatg tgcgcattga caccaggctc aacaaagctg tctgggccaa aggaataagg 240  
aatgtgcat accgaatccg tgtgcggctg tccagaaaac gtaatgagga tgaagattca 300  
ccaaataagc tatatacttt ggttacctat gtacctgtta ccactttcaa aaatctacag 360  
acagtcaatg tggatgagaa ctaatcgctg atcgctcagat caaataaaagt tataaaattg 420  
caaaaaaaaa aaaaaagggc ggccgctcta gaggatccaa gcttacgtac gcgtgcatgc 480  
gacgtcatag ctcttctata gtgtcaccta aattcaattc actgccgtcg gtttacaacg 540



671

tcgtgactgg gaaaaccctg cgttacccaa cttaatcgcc ttgcagcaca tcccccttcg 600  
ccagctgcgt aataacgaan aggcccgnac cgatcgccctt tccacagttg cgcancctga 660  
atggcgaatg gacgcgcctt taccgngcan taagcgccgc gg 702

&lt;210&gt; 733

&lt;211&gt; 441

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (22)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (62)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (99)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (101)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (118)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (126)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (152)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

<222> (185)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (212)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (260)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (310)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (356)

<223> n equals a,t,g, or c

<400> 733

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naattaaccc tcactaaagg gngcaaaagc tgggtgctcca ccgcggtgcg accgctctag 60
anctagtggg tcccccgggc tgcaggattt cggcacganc ncgtgcagat tgcagcanag 120
gagcgnaagg gaacgtcatc gtttggaaag cntcgcaata agacgcacac gttgtgccgc 180
cgctntggct ctaaggccta ccaccttcag angtcgacct gtggcaaatt tggctaccct 240
gccaagcgca agagaaagtn taactggagt gccaaggcta aaagacgaaa taccaccgga 300
actggtcgan tgaggcacct aaaatttgta taccgcagat tcaggcatgg ttccntgaa 360
ggaacaacac ctaaacccaa gagggcagct gttgcagcat ccagttcatc ttaagattgt 420
caacgattag tcatgcaata a

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441

<210> 734

<211> 379

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (42)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (323)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (324)

673

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (342)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (346)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (375)

<223> n equals a,t,g, or c

<400> 734

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ggccgcagaa gcgagatgac gaaggggaacg tcatcgtttg gnaagcgtcg caataagacg 60
cacacgttgt gccgccgctg tggctctaag gcctaccacc ttcagaagtc gacctgtggc 120
aaatgtggct accctgccaa gcgcaagaga aagtataact ggagtgccaa ggctaaaaga 180
cgaaatacca ccggaactgg tcgaatgagg cacctaaaaa ttgtataccg cagattcagg 240
catggattcc gtgaaggaac aacacctaaa cccaagaggg cagctgttgc agcattccag 300
ttcatcttta agaattgcaa cgnnttttagt catgcaataa antgtntctgg ggttttaaaa 360
aattaaaaga aaagnaanaa                                     379
```

<210> 735

<211> 187

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (172)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (176)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (177)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (179)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (185)

<223> n equals a,t,g, or c

<400> 735

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gcgggatcgt cggtaaatac gggacccgct atggggcctc cctccgaaa atggtgaaga 60
aaattgaaat cagccagcac gccaaagtaca cttgctcttt ctgtggcaaa accaagatga 120
agagacgagc tgtgggggac tggcactgtg gttcctgcat gaagacagtg gntggnnngng 180
cctgnac                                     187
```

<210> 736

<211> 576

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (94)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (334)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (340)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (361)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (371)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (397)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (409)

<223> n equals a,t,g, or c

<220>  
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<222> (429)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (436)  
<223> n equals a,t,g, or c

<220>  
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<222> (440)  
<223> n equals a,t,g, or c

<220>  
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<222> (444)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (452)  
<223> n equals a,t,g, or c

<220>  
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<222> (466)  
<223> n equals a,t,g, or c

<220>  
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<222> (479)  
<223> n equals a,t,g, or c

<220>  
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<222> (490)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (519)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (553)  
<223> n equals a,t,g, or c

<400> 736

676

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tcgacccacg cgtccgccc cgtccggcc tcagccctac cagcactggt catgtctaaa 60
ggtcacgta ttgaggaagt tctgaactt cttntggtag ttgaagataa agttgaaggc 120
tacaagaaga ccaaggaagc tgttttgctc ctttaagaaac ttaaagcctg ggaatgatat 180
caaaaaggtc tatgcctctc agcgaatgag agctgggcaa aggcaaatg gagaaaccgt 240
cgccgtatcc agcgagggc ccgtgcatca tctataatga ggataatggt atcatcaagg 300
ccttcagaa acatccctgg aattactctg cttnaatgtn aagcaagctg aaacattttg 360
naagcttgct ncctggtggg gcatgtgggg acgtttncgg cattgggang gaaatggctt 420
ttccgggant ttaganggan tgtnacgggc antgggcgta aagcgntttc cctccaagng 480
ttaactacan tcttcccagg caccaagatg gattaatana gatcttggca gaatctggaa 540
aagcccagag gtnccaaggg cccttcgggc accagc 576

```

&lt;210&gt; 737

&lt;211&gt; 297

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (7)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (243)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (254)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (261)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (266)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (275)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 737

```

gctccgncat ggcgtgtgct cgccactga tatcggtgta ctccgaaaag ggggagtcac 60
ctggcaaaaa tgctactttg cctgctgtat tcaaggctcc tattcgacca gatattgtga 120
actttgttca caccaacttg cgcaaaaaca acagacagcc ctatgctgtc agtgaattag 180
caggtcatca gactagtgtg gagtcttggg gtactggcag agctgtggct cgaattccca 240

```

ganttcgagg tggngggact naccgntctg gccanggtgc ttttggaaac atgtgtc 297

<210> 738

<211> 354

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (74)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (80)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (84)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (98)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (120)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (148)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (193)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (286)

<223> n equals a,t,g, or c

<220>  
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<222> (303)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (329)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (351)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (353)  
<223> n equals a,t,g, or c

<400> 738  
gcgagaatga agactattct cagcantcag actgtcgaca ttccagaaaa tgtcgacatt 60  
actctgaagg gacncacagn tatngtgaag ggcccccag gaaccctgcg gagggacttn 120  
aatcacatca atgtataact cagccttntt ggaaagaaaa aaaagaggct ccgggttgac 180  
aaatgggtggg gtnacagaaa ggaactggct accgttcgga ctatttgtag tcatgtacag 240  
aacatgatca agggtgttac actgggcttc cgttacaaga tgaggnetgt gtatgctcac 300  
ttncccatca acgttggtat ccaagagant gggctctattg ttgaaatcca nant 354

<210> 739  
<211> 504  
<212> DNA  
<213> Homo sapiens

<400> 739  
ccgccatcat gggtcgcatg catgctcccg ggaagggcct gtcccagtcg gctttaccct 60  
atcgacgcag cgtcccccact tgggtgaagt tgacatctga cgacgtgaag gacgagattt 120  
acaaactggc caagaagggc cttactcctt cacagatcgg tgtaatcctg agagattcac 180  
atgggtgttgc acaagtacgt tttgtgacag gcaataaaaat tttaagaatt cttagtcta 240  
agggacttgc tcctgatctt cctgaagatc tctaccattt aattaagaaa gcagttgctg 300  
ttcgaaagca tcttgagagg aacagaaagg ataaggatgc taaattccgt ctgattctaa 360  
tagagagccg gattcaccgt ttggctcgat attataagac caagcgagtc ctccctccca 420  
attggaaata tgaatcatct acagcctctg ccctggtcgc ataaatttgt ctgtgtactc 480  
aagcaataaa atgattgttt aact 504

<210> 740  
<211> 399  
<212> DNA  
<213> Homo sapiens

<400> 740



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ggacccgcca acatgggccg cgttcgcacc aaaaccgtga agaaggcggc ccgggtcatc 60
atagaaaagt actacacgcg cctggggcaac gacttccaca cgaacaagcg cgtgtgagag 120
gagatcgcca ttatccccag caaaaagctc cgcaacaaga tagcagggtta cgtcacgcat 180
ctgatgaagc gaattcagag aggcccagta agagggtatct ccatcaagct gcaggaggag 240
gagagagaaa ggagagacaa ttatgttcct gaggtctcag ccttggtatca ggagattatt 300
gaagtagatc ctgacactaa ggaaatgctg aagcttttgg acttcggcag tctgtccaac 360
cttcagtcac tcagcctaca gttgggatga tttcaaaac 399

```

<210> 741

<211> 431

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (335)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (393)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (417)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (425)

<223> n equals a,t,g, or c

<400> 741

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aaacaacggt cgtgccaaaa agggccgcg ccatgtgcag cccattcgct gcacgaactg 60
cgcccgggtgc gtgcccaagg ataaggccat caagaagttt gtcattcgga acattgtaga 120
agccgctgct gtcagggaca tatctgaagc aagcgtcttc gacgcctacg tgcttcccaa 180
gctctatgtc aagctgcatt attgcgtgac tgtgccatcc atagcaaggt tgtaggaat 240
cgatcccgtc aagcccggaa ggaccgaaca cccccaccac gattcagacc tgctggcgct 300
gcaccttcga cctccaccaa agcccatgta aagangccgt ttttgtaagg acggaaggaa 360
aattaccttg gaaaaataaa atggaagttg tanttttaaa aaaaaaaaaa aaacccnagg 420
ggggncccgt c 431

```

<210> 742

<211> 357

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (178)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (240)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (273)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (297)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (324)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (352)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (353)

<223> n equals a,t,g, or c

<400> 742

gtgcagcggg tcattaaaat cgatggcaag gtccgaactg atataaccta ccctgctgga 60  
ttcatggatg tcatcagcat tgacaagacg ggagagaatt tccgtctgat ctatgacacc 120  
aagggtcgct ttgctgtaca tcgtattaca cctgaggagg ccaagtacaa gttgtgcnaa 180  
gtgagaaaaga tctttgtggg cacaaaagga atccctcatc tgggtgactca tgatgcccgn 240  
accatccgct accccgatcc cctcatcaag gtnaatgatc cattcatatt gatttanaga 300  
ctggcaagat tactgatttc atcnatttcg acactggtaa cctgtgtatg gnnactg 357

<210> 743

<211> 249

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (42)

<223> n equals a,t,g, or c

<220>

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<221> misc feature
<222> (77)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (158)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (200)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (215)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (221)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (248)
<223> n equals a,t,g, or c

<400> 743
ggggcggtat gccgccaac gcttccgcaa agctcagtgt cncattgtgg agcgccctcac 60
taactccatg atgatgnacg ggcgcaacaa cggcaagaag ctcatgactg tgcgnatcgt 120
cnagcatgcc ttcgagatca tacgcctgct cacaggcnaa gaaccctctg caggtccttg 180
tgaacgccat catcaacatn ggtccccggg aagantccac ncgcattggg cgcgccggga 240
ctgttgana 249

<210> 744
<211> 383
<212> DNA
<213> Homo sapiens

```

<400> 744  
gaagaattgc atcgtgctca tcgacagcac accgtaccga cagtgggtacg agtcccacta 60  
tgcgctgccc ctgggccgca agaagggagc caagctgact cctgaggaag aagagatttt 120  
aaacaaaaaa cgatctaaaa aaattcagaa gaaatatgat gaaaggaaaa agaatgccaa 180  
aatcagcagt ctcttgagg agcagttcca gcagggcaag cttcttgctg gcacgcgttc 240  
aaggccggga cagtgtggcc gagcagatgg ctatgtgcta gagggcaaag agttggagtt 300  
ctatcttagg aaaatcaagg cccgcaaagg caaataaatc cttgttttgt cttcacccat 360  
gtaataaagg tgtttattgg ttt 383

<210> 745  
<211> 452  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (314)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (328)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (334)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (352)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (403)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (416)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (429)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

&lt;222&gt; (435)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (451)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 745

```

gcgcacgatg cctggagtta ctgtaaaaga cgtgaaccag caggagttag tcagagctct 60
ggcagccttc ctcaaaaagt ccgggaagct gaaagtcccc gaatgggtgg ataccgtcaa 120
gctggccaag cacaaagagc ttgctcccta cgatgagaac tggttctaca cgcgagctgc 180
ttccacagcg cggcacctgt acctccgggg tggcgtggg gttggctcca tgaccaagat 240
ctatggggga cgtcagagaa acggcgatcat gccagccac tttagccgag gctccaagag 300
tgtggccgcg cggntcctcc aagccctngg agngctgaa aatggtggaa anggaccaag 360
atggcggccc gcaaactgac acctcaggga caaagagatc tgnacagaat cgccgnacag 420
gtggcagcnt gccancaaag aagcattaga nc 452

```

&lt;210&gt; 746

&lt;211&gt; 114

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (11)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (22)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (55)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (85)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (98)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (103)

<223> n equals a,t,g, or c

<400> 746

tgcattgctgg ngctggctct gnccttgctg tctccagct ctgctgagga gtacntgggc 60  
ctgtctgcaa accaatgtgc cgtgncagcc aaggacangg tgnactgtgg ctac 114

<210> 747

<211> 165

<212> DNA

<213> Homo sapiens

<400> 747

ggcacagcca cccagggcct gagtcctgtc cacaccccag gtgacggccg gctccacaag 60  
gcagtgagcg tgggcccccg ggtgcacatc attgaggagc tgcagatctt ctcacggga 120  
cagcccgtgg cagaatctgc tctggggaca cccacagggg ggctg 165

<210> 748

<211> 583

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (46)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (291)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (341)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (387)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (458)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (462)

<223> n equals a,t,g, or c

685

<220>  
<221> misc feature  
<222> (480)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (537)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (541)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (543)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (546)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (580)  
<223> n equals a,t,g, or c

<400> 748  
ggctagaaga tgggttttga gaggaccct tttaccactg cctggntgca gaagtgccga 60  
aagagcactg gactccgga ggacacagca ttgttggtt tgccatgtac tattttacct 120  
atgaccctg gattggcaag ttattgtatc ttgaggactt cttcgtgat agtgattata 180  
gaggctttg cataggatca gaaattctga agaattctaa ccagggtgca atgagggtgc 240  
gctgcagcag catgcacttt tttggttagca gaatggaatg aaccattcat naacttctat 300  
aaaagaagag gtgcttctga tctgtccagt gaagaagggt ngagacttgt taagaatcga 360  
caaggagtct tgctaaaaat ggcaacntag gaggaggaa tgcttgctgt agatgacaac 420  
ctccattcta ttttagaata aaattcccca actttctntt gnttttctat gctgggttgg 480  
agtgaatta atttaaatga gcaccattt caaaagcttt aattaccaag tgggcgnttg 540  
ntnccntgtt ttgaaaattg aaggtcttgt tttaaaagggn ggc 583

<210> 749  
<211> 419  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (3)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (16)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (24)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (29)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (30)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (169)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (342)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (351)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (376)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (398)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (419)  
<223> n equals a,t,g, or c



687

&lt;400&gt; 749

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acnccgaggc ttcttnatta cggncggggn tgatgagga aagctggtga cgcctgcagg 60
tgaccgggtcc ggaattcccg ggctcgaccca cgcgtccggg cgtgatgtct cacagaaagt 120
tctccgctcc cagacatggg tccctcggtt tcctgcctcg gaagcgana gcaggcatcg 180
tggaaggtg aagagcttcc ctaaggatga cccgtccaag ccggtccacc tcacagcctt 240
cctgggatac aaggctggca tgactcacat cgtgcgggaa gtcgacaggc cgggatccaa 300
ggtgaacaag aaggagggtg gtggaggctg tgaccattgt anagacacca nccatggtgg 360
tttgtgggca ttgttngcta cgttggaata ccctcgangg ctccggaact tcaagaatn 419
```

&lt;210&gt; 750

&lt;211&gt; 507

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (453)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (475)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (497)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (499)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (503)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 750

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ggccgaacat ggagatcaag attatatctg gcactgcatt gatctcttct tagatttcat 60
tactgtcttc agaaaactca tgatgatcct ggccatgaat gaaaaggata agaagaaaga 120
gaagaaatga agtgaccatc cagcctttcc caattagact tcctctcctt ccaccctca 180
tttctttttt gcacacatta cagggtggtg gttctgtgat aatgaaaagc atcagaaaag 240
cttttgtact ttgtggtttc ctctattttg aattttttga tcaaaaaact gattagcaga 300
atatagtttg gagtttggtt tcatcttcct ggggttcccc tcaactccctt ttttggcaac 360
cccatctgta gcctcttcct ctactcaggc agtcgaccgg ccacgatgag aagtgggacc 420
agcagagggc gccaaactca ggagcccgct ttncaccca gcttcattca cccantggac 480
ctgaactggt ttggtananc ccnccgg 507
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&lt;210&gt; 751

<211> 435  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (1)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (11)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (23)  
<223> n equals a,t,g, or c

<220>  
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<222> (31)  
<223> n equals a,t,g, or c

<220>  
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<222> (34)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (110)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (134)  
<223> n equals a,t,g, or c

<220>  
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<222> (151)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (158)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (199)  
<223> n equals a,t,g, or c

<220>  
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<222> (215)  
<223> n equals a,t,g, or c

<220>  
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<222> (218)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (226)  
<223> n equals a,t,g, or c

<220>  
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<222> (239)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (243)  
<223> n equals a,t,g, or c

<220>  
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<222> (257)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (295)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (321)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (324)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (331)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (355)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (363)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (365)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (403)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (420)

<223> n equals a,t,g, or c

<400> 751

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nactggaagt nctccgggag aanggatctc nacngcgggtg ccggacgctc tagaactagt 60
ggatcccccg ggctgcaggt agcctgagct tagctcagcg ccggggcttn accaaagacct 120
acactgttgg ctgngaggaa tgcacagtgg ntccctgntt atccatccc tgcaaactgc 180
agagtggcac tcattgctng tggacggacc agctnctnca aggctntgaa aagggttnc 240
agncccgta ccttgcntgc ctgcctcggg agccagggct gggcacctgg cagtnctgc 300
ggtcccagat agcctgaata ntgnccggag nggaagctga agcctgcaca gtgtncaccc 360
tgntnccact cccatctttc tttcggacaa tgaaataaag agntaccacc cagcaaaaaan 420
aaaaaaaaa acctg 435
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<210> 752

<211> 591

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (195)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (240)

<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (319)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (345)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (365)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (407)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (452)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (456)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (480)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (556)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (570)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (572)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (579)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (586)  
<223> n equals a,t,g, or c

<400> 752  
gcggcacgag gcgcccagag agacaccaga gaacccacca tggccccctt tgagcccctg 60  
gcttctggca tccgtgtgtt gctgtggctg atagcccccac gcagggcctg cacctgtgtc 120  
ccacccacc caccagacggc cttctgcaat tccgacctcg tcatcagggc caagtctgtg 180  
gggacaccag aagtnaacca gaccacctta taccagcgtt atgagatcaa gatgaccaan 240  
atgtataaaag ggttccaagc cttaggggat gccgctgaca tccgggtcgt ctacaccccc 300  
gccatggaga gtgtctgcng atactttcac aggtcccaca accgnagcga ggagtttctc 360  
attgntggaa aactgcagga tggacttttg cacatcacta cctgcanttt tgtggctccc 420  
tggaacagcc tgagcttagc tcagcgccgg gncctnacca agacctacac tgttggctgn 480  
gaggaaatgc acaagtgtt cctgtttat ccatccccctg caaactgcag agtgggcact 540  
cattgcttgt aggacngacc agctcctacn angctcttna aaaggncctt c 591

<210> 753  
<211> 547  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (429)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (454)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (489)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (503)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (512)  
<223> n equals a,t,g, or c

&lt;400&gt; 753

aagcacttgt ccagatgagc agtgtgtgaa ttctcctgga tcttaccagt gcgttccttg 60  
cacagaagga ttccgaggct ggaatggaca gtgccttgat gtggacgagt gcctggaacc 120  
aaacgtctgc gcaaattggtg attgttccaa ccttgaaggc tcctacatgt gttcatgccca 180  
caaaggctat acccggactc cggaccacaa gcaactgtaga gatattgatg aatgtcagca 240  
agggaatcta tgtgtaaacg ggcagtgcaa aaataccgag ggctccttca ggtgcaactgt 300  
ggacaggggt taccagctgt cggcagctaa agaccagttt gaagacattg atgaatgccca 360  
caccgtcatc tctgttgctc atgggcatgc aagaacactg aagctctttt ccatgtgttt 420  
tttgaccang gttacagaac atctgggctt gganacactg tgaaaaattt caatgaatgc 480  
ttggaagana aaatttttgc canaaaagaa antgctttat actgcagggt cctatgatgt 540  
cttgtcc 547

&lt;210&gt; 754

&lt;211&gt; 384

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (307)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (374)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 754

gctcggtctc agcgccatgg cgccctccag gaagttcttc gttgggggaa actggaagat 60  
gaacgggagg aagcagagtc tgggggagct catcggcact ctgaacgcgg ccaagggtgcc 120  
ggccgacacc gaggtggttt gtgctcccc tactgcctat atcgacttcg cccggcagaa 180  
gctagatccc aagattgctg tggctgcgca gaactgctac aaagtgacta atggggcttt 240  
tactggggag atcagccctg gcatgatcaa agactgcgga ccacgtgggt ggtcctgggg 300  
cactcanaga gaagcatgtc tttggggaat cagatgagct gattgggcag aaagtggccc 360  
atgctctggc aganggactc ggat 384

&lt;210&gt; 755

&lt;211&gt; 253

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (60)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (217)

&lt;223&gt; n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (240)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (244)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (252)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (253)  
<223> n equals a,t,g, or c

<400> 755  
tgtagatcct tgaagactct gattctctga gactgaggag agatgtctta ccagcagcan 60  
cagtgcgaagc agccctgccca gccacctcct gtgtgcccga cgccaaagtg cccaagagcc 120  
atgtccacccc ccgaagtgcc ctgagcctta cctgcctcct ccttgtccac ctgagcattg 180  
cccacctcca ccttgccagt ataaatgccc tcctgtngca accataccac cctggcagcn 240  
gaanttcccc cnn 253

<210> 756  
<211> 183  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (5)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (9)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (48)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (57)



<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (79)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (83)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (108)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (141)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (144)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (146)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (148)

<223> n equals a,t,g, or c

<400> 756

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ggcanaaana aggtaggaat aaggctagac cttaaacttc cctaagggnat acttttntag 60
ctaccttctg cctgtgtnt ggnacctaca tccttaatga ttgtcctntt acccattctg 120
gaattttttt ttttttaaaa naantncnga aagcattttg aaaaaaaaaa aacaaaaaaaaa 180
aag 183
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<210> 757

<211> 99

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (77)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (79)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (82)

<223> n equals a,t,g, or c

<400> 757

agcctttaat anatcatata ggaaantggt agntgcagta cggthggaat tccgggtgac 60  
tcagcgctccg ggattgnanc anctgggatt ggagtttgg 99

<210> 758

<211> 60

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (36)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (38)

<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (40)  
<223> n equals a,t,g, or c

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<221> misc feature  
<222> (45)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (46)  
<223> n equals a,t,g, or c

<400> 758  
ggcaccgaggt tttttttttt tttttttttt tttttntntn ttttnntttt ttataaaaaa 60

<210> 759  
<211> 66  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (6)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (59)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (63)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (65)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (66)  
<223> n equals a,t,g, or c

<400> 759  
agaganaacc gagttttttt tttttttttt tttttttttt tttttttttt ttttttttnc 60  
centnn 66

<210> 760  
 <211> 487  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 <222> (409)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (433)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (473)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (475)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (477)  
 <223> n equals a,t,g, or c

<400> 760  
 tacagatgga gcaaagtgc taacagagaa atagaggtga tgctgctaaa gggagaaatg 60  
 ccaggcggac aaagttcagt gtcgggaatt ttccccgtga cattcactgg ggcattgagat 120  
 tttggaagaa gttttttact ttggtttagt ctttttttcc ttccttttta ttcagctaga 180  
 atttctggtg ggttgatggt agggataaat gtgtctgtgt tgcttcaa at tggtctgaaa 240  
 ggctatcctg ctgaaagtcc tgctttccta tctagcattt atttctctgg caaacttttc 300  
 tttcttttct tttttaaagt aaacttggtg attgagctta actgtatttc agtatttcca 360  
 gcttatgtgt acattattcc aatgataccc aacagttatt tatattttnt aacaaattca 420  
 cagtctgaat gangacttta tttcatggat tataataagg aatgaggtaa ttngngnctc 480  
 acattca 487

<210> 761  
 <211> 422  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (253)  
 <223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (297)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (350)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (353)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (382)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (403)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (406)  
<223> n equals a,t,g, or c

<400> 761  
gaaaaggcta aaatcatgaa ttagttacaa gcaacagtac caacttatgt gacccctgag 60  
gggtggggct gtgagctctt aatttgtttt tgattctgaa aaactctgct tcctggcatc 120  
caggagttag agattgagcc ttatcatctt tttctcaaaa ctagtttttg atgctttctt 180  
tcatgggaat agtcactttt ttatttagta aatcgcatg ctggaaccac caaggatgtg 240  
gaatgtcctt gantgtatta tttatgcaag tcacagtcac gtttgccatc atggcantat 300  
ttgaaacact aataatgtgt ttttactttt ttatccccgt taaaatgatn ttnaaaagga 360  
aaaagggtgt tatagcccct anaatttctg ggtccaaatt atnccnaaaa tttcctaaaa 420  
aa 422

<210> 762  
<211> 375  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (279)  
<223> n equals a,t,g, or c

700

<220>  
<221> misc feature  
<222> (315)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (373)  
<223> n equals a,t,g, or c

<400> 762  
tttgaccact tgccaagtcc ctgtctcttt cagacacaga caagcttcat ttaaattatt 60  
tcaactgatg aagtaacaat aaagttataa atgataatga tcagatgaaa taatttataa 120  
ctttattggt acttcatcag tgtttccttt tgaaagggtg atgaattcat tacattttta 180  
ttctaagtta ttatctgtag attagaagat aaaatcaagc atgtatctgc ctatactttg 240  
tgagttcacc tgtctttata ctcaaaagtg tcccttaana gtgtccttcc ctgaaataaa 300  
tacctaaggg agtgnaacag tctctggagg accactttga gcctttggaa gttaagggtt 360  
cctcagccac ctngt 375

<210> 763  
<211> 372  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (261)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (301)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (320)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (338)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (344)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (354)

<223> n equals a,t,g, or c

<400> 763

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caatatgtag cttactcttt ttttcccccc ttcttaaacc accagtgggtt cattttttaag 60
atTTTTtcat caagagaaga ataactttac taaattttat ttctttattt gcaaaagaat 120
ctttattaaa acaacaatc ttaactatgc acatgatgtg accagatcat cttgaaaata 180
ttcctcttta gtaggaactc tttgttttta actcttggtg tggtcagaat ataatacttc 240
cataattact tataattcct ntccgggtac tgggggctat aaatacaact tttttaaatg 300
naattcatgg ttatcaaccn ggctccaagt accattangg ggtncctat gggnaattac 360
cttgggaaag tc 372
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<210> 764

<211> 195

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (46)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (52)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (60)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (67)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (71)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (86)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (94)

<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (128)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (146)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (151)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (153)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (183)  
<223> n equals a,t,g, or c

<400> 764  
cggacgcgtg ggcggacgcg tggggaaaagg taagctctag cttaangtct angatttgtn 60  
ctttganatt naggaaggta aggatnggtc agangatgta acttgatgtg agcagtaata 120  
aacctgtntt aaatatcata ctgtgnatat ntnattgaaa atttatttca gagcggaaaa 180  
acnttagcta aaatc 195

<210> 765  
<211> 103  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (30)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (76)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (83)  
<223> n equals a,t,g, or c



<220>  
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<222> (91)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (94)  
<223> n equals a,t,g, or c

<400> 765  
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aattaaggtt agcggntcat gtncaagctg ngntngaaag tgg 103

<210> 766  
<211> 538  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (285)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (316)  
<223> n equals a,t,g, or c

<220>  
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<222> (327)  
<223> n equals a,t,g, or c

<220>  
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<222> (379)  
<223> n equals a,t,g, or c

<220>  
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<222> (436)  
<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

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<220>  
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<220>  
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<222> (474)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (504)  
<223> n equals a,t,g, or c

<220>  
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<222> (516)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (520)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (522)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (526)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (534)  
<223> n equals a,t,g, or c

<400> 766  
cccgcgcggg cgcaggcggc cggaatggcg gggcccggtt ggggtccccc gcgcctggac 60  
ggcttcatcc tcaccgagcg cctgggcagc ggcacgtacg ccacggtgta caaggcctac 120  
gccaagaagg aactcgtga agtggtagcc ataaagtgtg tagccaagaa aagtctgaac 180  
aaggcatcgg tggagaacct cctcacggag attgagatcc tcaaggcatt cgacatcccc 240  
acattgtgca gctgaaagac tttcagtgtg agctgggggc ggggncgctg ccaaaaggag 300  
tggagaagga catctntttc aggccgnctc tctgcctctt aaaacaacag ttgggaacag 360

ttgaaccaat taatcttanc ttcaatccat tggaagttt ttttgccggc caaggggggg 420  
gccggaaacc ttggtncctc nggcntttcn aatcccaatt aaaccccggc caanggaatt 480  
ttcttgggccc cttgaaagaa aaanggtttg ggcccncccn tnggtncctt tccnaatg 538

<210> 767

<211> 415

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (350)

<223> n equals a,t,g, or c

<400> 767

ctttcccaag ggaaacactc agctttctat agaaaattgc actttttgtc gagtaatcct 60  
ctgcagtgat acttctggta gatgtcacc agtggttttt gttaggtcaa atgttcctgt 120  
atagtttttg caaatagagc tgtatactgt ttaaattgtag caggtgaact gaactggggt 180  
ttgctcacct gcacagtaaa ggcaaacttc aacagcaaaa ctgcaaaaag gtggtttttg 240  
cagtaggaga aaggaggatg tttatttgca gggcgccaag caaggagaat tgggcagctc 300  
atgcttgaga cccaatctcc atgatgacct acaagctaga gtattttaan gcagtggtaa 360  
atttcagga aagccagaag ttaaaggcca aaattgtaaa tcagtcgaga tcggg 415

<210> 768

<211> 425

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (351)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (381)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (389)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (422)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (423)

<223> n equals a,t,g, or c

<400> 768

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gaccctcag gccaggccct gatccagttc tccaggggtct ttctcagggg cagggtccatg 120
gggagaccat ggggtgcttg tctgacactg acctcgccct gctgagtccc cccatcagac 180
tgtccttcct ctgcagcgag tgtctgcagg gtctggatcc aggaaaggaa ttctgatctg 240
tggaagtttg tctcccccggt gtgtgtcctg cactaaatgt ccaaaccctg atacaggatg 300
taatgcagag agggccacag gcacaaccca ggctgacaa tcccgtatgt nggaagtaga 360
actgaccccc aacaccacaga ngtcagtng aaatactcac ggtatacatg gaaaaaaaaa 420
annaa 425
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<210> 769

<211> 256

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (34)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (60)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (83)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (85)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (112)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (120)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (151)

<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (163)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (200)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (211)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (235)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (250)  
<223> n equals a,t,g, or c

<400> 769  
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gcaccagctg gcctcccaaa ggngnggcag ccgtgcttat atttttatgg tnacaatggn 120  
cacaaaatta ttatcaacct aactaaaaca ntccttttct ctnttttcct ggaattatca 180  
tggagttttc taattctctn ttttggaat ngtagattgt ttttgaaatg ctttnacgat 240  
gttaaaatan tttatt 256

<210> 770  
<211> 316  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (3)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (46)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (158)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (173)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (200)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (228)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (266)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (267)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (281)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (284)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (291)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (294)

<223> n equals a,t,g, or c

<400> 770

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ctgtctctgg tggagacaat aaggaggagt tacagatgca gccacagatt gatcatctgc 120  
ctttaacgtg aatcggagat gctttgtaat ctactgtnc agctgaagca ctncatgtta 180

709

cgaggaagaa actacaagtn atgttcaa at ctattttggg tcattttnat gtacctttgg 240  
gttcaggcat tatttggggg gttttnttc caaaggaact naantaaagt natnttgctt 300  
attaaaaaaaa ggaaaaa 316

&lt;210&gt; 771

&lt;211&gt; 68

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (8)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (14)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (22)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (32)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (36)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (55)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 771

caaaagcngg agcnccaccg cnggcgaccg cncctanaact agtggatccc ccggnctgca 60  
ggaattca 68

&lt;210&gt; 772

&lt;211&gt; 258

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (42)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<220>

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<222> (47)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (60)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (61)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (139)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (155)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (189)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (225)

<223> n equals a,t,g, or c



<220>  
<221> misc feature  
<222> (235)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (250)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (257)  
<223> n equals a,t,g, or c

<400> 772  
cggacggtgg gtttttntnt tttttttttt tttttttttt tnttntnttt tttttttatn 60  
nttgggtcat ttccacatgc tttattccag caatcaaaat aattaaaaac atctcaaatt 120  
attatacaca tacaaaatng gtacagagtc ttttncttcc tcccaccctt agggggaaaa 180  
actgctttnt gctttgggaa gttgtctctg aaaccgggg acagnggacg caggncagac 240  
taggagggan ccgggang 258

<210> 773  
<211> 587  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (535)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (559)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (565)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (570)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (572)

<223> n equals a,t,g, or c

<400> 773

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ggatcccaac tgctcctgcg ccgccggtaa gaggctgggg atgccagtg tagactgtag 60
cgctagagaa gcaatttctg acccctcttt ctttctctgg tcaactcaatt tcaggacagg 120
agttgctcct tcccaaagag ttttggggta tcttctctc cattctaggt tattcggagc 180
ccctttttta ccgttaagga gatctgagtt aatggcttgc tcaagttccc aggaatcggg 240
tgtggactga ggaactcggc cccgggctct tagtacgccg tcccttggtc aggtatccag 300
ggacggttct cacctctgtc ttttctcctt gcaggtgact cctgcacctg cgccggctcc 360
tgcaaagtca aagagtgcga atgcacctcc tgcaagaaaa gtaagtggga tcctctcttt 420
cctctacccc ttcctgtcct ccagcctgtc ccctcttcac catcctcagg ggaattaaag 480
caagtctggg gatgccccat tgcgccggga aattggtggc ctccctcagtg atccntatca 540
aggagaagca aggaatccnt aattnccggn gnccggttga cttaact 587
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<210> 774

<211> 89

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (74)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (76)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (77)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (79)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (83)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (86)

<223> n equals a,t,g, or c

<400> 774

ggcagagggga aacatcagggn atgctaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60  
aaaaaaaaaa aaanannana aanaantat 89

<210> 775

<211> 113

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (30)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (59)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (75)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (77)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (106)

<223> n equals a,t,g, or c

<400> 775

ggtccggcgn ggtggaggga aacgcctccn tntctatata aggaatttcc cggtgtntnc 60  
gggtccctttt ccctntnttc agagtggggg gcccaaattt gggcgntctg ttt 113

<210> 776

<211> 66

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (49)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (65)

<223> n equals a,t,g, or c

<400> 776

ggcanaggat ttnaaccctc accttcgtgt ttcccccaat gtttaaaang tttggatggt 60  
ttgtng 66

<210> 777

<211> 441

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (401)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (436)

<223> n equals a,t,g, or c

<400> 777

atttgatga aagaacttaa gcaaccttaa tattggctga gactttttaa agagaaggag 60

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aatttacttt tttgcctaatt taggaggaag cttgggtcata aggaaaaaga gctgtgttta 120
ggaaatagtg tgtgcccttt gaattaatgg agtgacaccg tgattcatga caggattcca 180
tttactggct gtatgccagc tgctgacagt ctataagtct taatagagat ggagtagagg 240
agctgaaggt tggcatctgc tcattgatga caactatgtt tacaatatgt tgtggactag 300
ttggggcact gaggcaggag aatcacgtgg agcccacggg ttcaagacca gcctgggaaa 360
catagcaaga ccttgtttct aaaaaaaaaa aaaaaaaaaa ncgagggggg gcccgtacc 420
caattcgccc taaagngagt c

```

441

&lt;210&gt; 778

&lt;211&gt; 483

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (335)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (356)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (471)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (472)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (478)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (481)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (482)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 778

```

gcttactttt aaccagtgaatttgacctgc ccgtgaagag gcgggcataa cacagcaaga 60
cgagaagacc ctatggagct ttaatttatt aatgcaaaca gtacctaa aacccacagg 120

```

```

tcctaaacta ccaaacctgc attaaaaatt tcggttgggg cgacctcgga gcagaaccca 180
acctccgagc agtacatgct aagacttcac cagtcaaagc gaactactat actcaattga 240
tccaataact tgaccaacgg aacaagttac cctagggata acagcgcaat cctattctag 300
agtccatata aacaataggg tttagcacct cgatnttggg tcaggacatc ccgatngtgc 360
agccgctatt aaagggttcgt ttgttcaacg attaaagtcc tacgtgatct gagttcagac 420
cggagtaatc caggtcggtt tctatctact tcaaattcct ccctggaaaa nnagaagngg 480
nng 483

```

<210> 779

<211> 389

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (261)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (325)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (337)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (362)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (367)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (389)

<223> n equals a,t,g, or c

<400> 779

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ccctcttccc ggctccagct ccgcgcagc ctccagcctt tgctccccct cccaaagtcc 60
cctccccgga gcggagcgca cctaggggtc ctcttccgct cccccagccc agctaccgct 120
tcagaccagc agcctcgggg ggcaccccc cgccagcctg cctccctccc gctcagccct 180
gccagggtcc ccagccatg aatctcttcc gattcctggg aaaactctcc caactcctcg 240
ccatcatctt gctactgctc naaatctgga attcccgtc gtgcgcgaa attcaggaaa 300
aaaacagtcc cgtttggtgt ggggntttca atggcnaat ttgaaatcct ttcacaataa 360
tntttantct aaaaattttt ttaaaggn 389

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<210> 780  
<211> 66  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (18)  
<223> n equals a,t,g, or c

<400> 780  
ttgtttttaaa aactatgnac caggtttcta atgatgaaat aaagcacctg tttgttttat 60  
accaaaa 66

<210> 781  
<211> 255  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (46)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (83)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (94)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (133)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (150)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (163)  
<223> n equals a,t,g, or c

<220>

<221> misc feature  
<222> (172)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (179)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (182)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (184)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (209)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (224)  
<223> n equals a,t,g, or c

<400> 781  
ggcagagcag agcagacgca caggccggaa aaggcgcac taacgngtat ctaggccttg 60  
gtaactgcgg acaagttgct ttnacctgaa ttnatgata catttcatta aggttccagt 120  
tataaaatat ttngttaaat atttattaan gtggactata gantgcaaac tnccatttnc 180  
cngntaaact tgtttttaaa ttatggccnt aggtaaccce tatngtaggg tattaatttc 240  
cttgaacca aacca 255

<210> 782  
<211> 348  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (3)  
<223> n equals a,t,g, or c

<220>  
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tgaatccacc cgagnttggc ctcccaagtg gctgggcatt ataggcgtga gcactcacgt 120  
ccncgcctca aaatngcata ttcaaagaag caatttcagt tcctttctaa gctttgtnag 180  
tnaaggggct ccactgactt cctaggccct gtaaatttaa accagtcttt aagggtttgc 240  
caggaaaagt cccttctttc caagtgggtt tttccaaatg ggcacaatgg caagcnaac 300  
agaggangaa acattaaaaa aannaaaaaa aatttggggg ggggnncc 348

<210> 783  
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<223> n equals a,t,g, or c

<220>  
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<222> (49)  
<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

721

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<223> n equals a,t,g, or c

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<222> (142)  
<223> n equals a,t,g, or c

<220>  
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<222> (144)  
<223> n equals a,t,g, or c

<220>  
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<222> (146)  
<223> n equals a,t,g, or c

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atctgatgaa aaggtcanac tnaaacgcct tgcacggctt ctgggcttga tcacagctcc 120  
ctaggtaggt naccacagag nngncncttc tagtgagcct 160

<210> 784  
<211> 81  
<212> DNA  
<213> Homo sapiens

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<220>  
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<220>  
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<223> n equals a,t,g, or c

<220>  
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<222> (79)  
<223> n equals a,t,g, or c

<220>  
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<222> (81)  
<223> n equals a,t,g, or c

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caaaaaaaaaa aaaaaannng n 81

<210> 785  
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<212> DNA  
<213> Homo sapiens

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<220>  
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tccctcttcc ctctccctgc ccagccctcc cttccttcct ctgccggcaa ggcagggacc 120
cacagtggct gcctgcctcc gggaggggaag gagagggagg gtgggtgggt ggganggggc 180
cttcctccag ggaatgtgac tctcccaggc cccagaatag ctccctggacc caagcccaag 240
gcccagcctg ggacaaagct ccganggtcg gctggccgga gctattttta cctccgcct 300
cccctgctgg tgccccacc tggacgtctt gctgcagagt ctgacactgg attnnnaaaa 360
nctnaaaang aacctggta cccaattctg ggncccgnc ctaanctcg ncccaacca 420
tcactgtgga acaatggagt ctggaataaa tgctgtttgt canatcaaca aaaaaaaaaa 480
aaaaggggng gccgctttag aggattcaaa gcttaagtaa nggtgcatgn gaagttcana 540
a
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<210> 786

<211> 433

<212> DNA

<213> Homo sapiens

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<220>

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<222> (350)

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<220>

<221> misc feature

<222> (400)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (402)

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<220>

<221> misc feature

<222> (405)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (422)

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<400> 786

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cccacgcgtc cggcttaaca cgtgcgcgag tcgggggctc gcacgaaagc cgccgtggcg 60
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caatgaaggt gaaggccggc gcgctcgccg gccgaggtgg gatcccagg cctctccagt 120
ccgccgaggg cgcaccaccg gcccgctctcg cccgccgcgc cggggaggtg gagcacgagc 180
gcacgtgtta ggacccgaaa gatggtgaac tatgcctggg cagggcgaan cagaaggaaa 240
ctctggtgga ggtccgtagc ggtcctgacg tgcaaatcgg tcgtccgacc tgggtatagg 300
ggcgaaagac taaatcgaac catcttagta agctggtttc cctccgaaan tttccctcaa 360
gataagcttg gcgctctcgc aagaccccgga aggaaccccn gncanggaat ttttatccgg 420
tnaaagcgaa ttg
433

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&lt;210&gt; 787

&lt;211&gt; 527

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (492)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 787

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cccaggatgt gtggcgagag cctgggccag cccacagcgt tcctagtcag gcagccacac 60
cttggtcctc atcttggtcc cttccaatct gaaacctcgt gcctggctcg tctgccacct 120
acatttctct ttccagctgc tgttttgtaa aaagaaaaag aaaaaagaag cccaaactag 180
tgagagtaat atctaattat ctcaattttt gtaggtctgt gataaagaac ttagtcatcc 240
cttccacctc ctactgtgaa gaacagacct tgggtccac actgaaatcc cctctagtca 300
cccattccca cccccaggg agctgcctcc caggcagggg gtgcagaaaa tgattgatgg 360
gctggggaac cctggagagc ctcgactccg gaagtctcaa ggtgcctcct cctctcctta 420
gctggcccggt tggttttctg agcagggggc tgaactgtga acaagtcaga caaataaagc 480
aagggctctgc ancatctgca atgtcaaaaa aaaaaaaaaa aaaaaaa 527

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&lt;210&gt; 788

&lt;211&gt; 203

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (121)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (160)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (179)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

<222> (181)  
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cagaagagga aaaaaaaact acaaaaaaca aaacattgaa ggttgatatt ttatgtggaa 120  
naacatttga attgaattca gaatttttct gaaggtgtan atactttttt tttttttttna 180  
ncaaaaaccc tnatttcaaa agg 203

<210> 789  
<211> 124  
<212> DNA  
<213> Homo sapiens

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<222> (38)  
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<220>  
<221> misc feature  
<222> (70)  
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<220>  
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<222> (87)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (94)  
<223> n equals a,t,g, or c

<220>  
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<222> (113)  
<223> n equals a,t,g, or c

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ctgcgcgcgn cccccagtcc cgcaccngtt cggncaggcc taagttagcc ctnaccatgc 120  
cggt 124

<210> 790  
<211> 293



<212> DNA  
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<223> n equals a,t,g, or c

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<220>  
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<222> (275)

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<220>

<221> misc feature

<222> (281)

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<222> (287)

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<400> 790

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ctggcaaaga tggaaccant ggacatccag gtgccattgg accaccaggg cctcgaggta 120
acagnngtga aagnggatct nagggtctcc cagggccacn cagggaacc agggccctnc 180
tggnacctcc tggtgcccct ggtccttgct gtggtggtgt tngagccgct gccattgctg 240
ggattgggag gttgaaaaag cttggnccgt ttgnccccg ngtttantgg ggg          293
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<210> 791

<211> 129

<212> DNA

<213> Homo sapiens

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<222> (104)

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<220>

<221> misc feature

729

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<220>  
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<400> 791  
gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60  
aaaaaaaaaa aaaaaaaagg ggcggccgttt tanaggatcc aagnttacgt acncgngcnt 120  
gcaacgtca 129

<210> 792  
<211> 267  
<212> DNA  
<213> Homo sapiens

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ggcgccgcgg ggaggaggcg ctgcgcgcag tcccgggcgc gttctagggc gccatgctgc 120

730

gggaagtctc gcgcgattag tggggaggtc tcgcggcttc tggctacttg gtggcgaggt 180  
gaagagcttc tgcaggtgct gggggcggcg aacgcggcgg gaaagaaaaa aaaaaaaaaa 240  
aaaaaanctn ggnaagtatt tttnan 267

<210> 793  
<211> 453  
<212> DNA  
<213> Homo sapiens

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<220>  
<221> misc feature  
<222> (347)  
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<220>  
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<222> (443)  
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<400> 793  
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gccgtagnag ccggggacag gtcagtcoga gacgagagaa gcggtcagtg ttgtacagtg 120  
ttttgggcat gcacgtgata ctacacacagt ggcttctgct caccaacaga tgaagacaga 180  
tgcaccaacg aggctgatgg gaaccatcct gtagaggtcc atctgcgttc agaccagac 240  
gatgccagag ctatgactgg gcctgcaggt gtggcgccga ggggagatca gccatggagc 300  
agccacagga ggaagcccct gaggtccggg aagaggagga gaaagangaa gtggcagaag 360  
cagaaggagc ccagagctc aattggggac cacagcatgc acttccttcc agcagctaca 420  
cagactctcc cggagctcct cgncaacctt atg 453

<210> 794  
<211> 141  
<212> DNA  
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<220>  
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<222> (30)  
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<220>  
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<220>  
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ggngggggcg cgccggtctc ccggagcggg accgggtcgg aggatggncg agaatcacga 120  
gcgacgggtg tngtgngtg t 141

<210> 795  
<211> 167  
<212> DNA  
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<223> n equals a,t,g, or c

<220>  
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<222> (55)  
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<222> (112)

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<222> (149)

<223> n equals a,t,g, or c

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<222> (164)

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ngcggcacag cagcagcgac gcagcggcga cantcagagc agggaggccg cnccacctgc 120  
gggcccggccg gagcgggcag ccccangenc cctccccggg cacncgc 167

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<211> 331

<212> DNA

<213> Homo sapiens

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<222> (10)

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<220>  
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<220>  
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<220>  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (146)  
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<220>  
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<222> (192)  
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<220>  
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<222> (225)  
<223> n equals a,t,g, or c

<220>  
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<222> (228)  
<223> n equals a,t,g, or c

<220>  
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nctccactca gctaattgtna caacatgnng nctacttctc nctnnctttt acannnacag 120  
gannnnnggcc nnagttaata tatccngtgt acctcactgt ccaatatgaa aaccgtaaag 180  
tgccttatag gnatttgcgt aactaacaca ccctggttca ttgancnta cttgctgaag 240  
nngnaaaaga caggataagn tttcaatagt ggcataccan atgggacttt tgatgaaatg 300  
aatatcaata ttttctgcaa ttccatgnng t 331

<210> 797  
<211> 699  
<212> DNA  
<213> Homo sapiens

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tagaaattga aacctggcgc aatagatata gtaccgcaag ggaaagatga aaaattataa 120  
ccaagcataa tatagcaagg actaaccctt ataccttctg cataatgaat taactagaaa 180  
taactttgca aggagagcca aagctaagac ccccgaaacc agacgagcta cctaagaaca 240  
gctaaaagag cacaccgctc tatgtagcaa aatagtggga agatttatag gtagaggcga 300  
caaacctacc gagcctggtg atagctggtt gtccaagata gaatcttagt tcaactttaa 360  
atttgccac agaaccctct aaatcccctt gtaaatttaa ctgntagtcc aaagaggaaac 420  
agctcttttg actactaggaa aaaaccttgt agagagagta aaaaatttaa caccataagt 480  
aggcctaaaa gcagccacca attaagaaag cgttcaagct naacaccac tacctaaaaa 540  
aatcccaaac atataactga actnctacac ccaattgggc caatctatna ccctatnnaa 600  
gaactaatgg tagtataagt acatgaaaac cattnttctt cgnataagcc ttgcgtnaga 660  
attaaaacac tgaactgnac attaaacagc caatntcta 699

<210> 798

<211> 138

<212> DNA  
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

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cccggcacag agtcgatgct caataaatgt gtgttgactg catgaatgac ctggapaaaaa 60  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaancccn 120  
gggggggnncc ccncccc 138

<210> 799  
<211> 496  
<212> DNA  
<213> Homo sapiens

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<222> (443)

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<220>

<221> misc feature

<222> (485)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (490)

<223> n equals a,t,g, or c

<400> 799

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agcttgtatc tgatatcagc actggattgt agaacttggt gctgattttg accttgtatt 120
gaagttaact gttccccctg gtatttggtt aatacctgt acatatcttt gagttcaacc 180
tttagtacgt gtggcttggt cacttcgtgg ctaaggtaag aacgtgcttg tggaagacaa 240
gtctgtggct tggtagtct gtgtggccag cagcctctga tctgtgcagg gtattaacgt 300
gtcaaggctg agtggtctgg ggaattctct agaggctggc aagaaccagt tggttttgtc 360
cttgcggggt ctgtcaaggg ttggaaatcc caagccgtag gaccagttc cctnccttaa 420
ccgaaagtctt tggccaaaca cnnnggccgt aactggcctt gagttggaac ggttgcataa 480
gccgnaaagn atcaac                                     496

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<210> 800

<211> 516

<212> DNA

<213> Homo sapiens

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<220>

<221> misc feature

<222> (29)

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<220>

<221> misc feature

<222> (30)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (44)

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<222> (80)

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<222> (107)

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<220>

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<220>

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<220>

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<222> (173)

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<220>

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<222> (183)

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<222> (188)  
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<223> n equals a,t,g, or c

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<222> (199)  
<223> n equals a,t,g, or c

<220>  
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<222> (208)  
<223> n equals a,t,g, or c

<220>  
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<222> (220)  
<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<220>  
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<223> n equals a,t,g, or c

<220>  
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<220>  
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<222> (501)  
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<400> 800



743

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cacaccaccc cttgccaaan tcattctgctt gctccccggg gggagangac cgccggcctc 120  
tnctactagc ccaccagccc accagggana aaataancca tganangcng cgnccgccac 180  
ccngtgtnen cantccccnc cttcccgnnt cccttagaan cctgccgcgt cctatctcat 240  
gacgctcatg gaaccncttt ctttgatctn ctntntctta tctccccctc tttntngttc 300  
taaagaaaat cattttgatg caaggtcctg cctggnnatca natccgaagt gtcctgcag 360  
tnaccctttt cctggcattt ctcttccacg cgacaagtct gctagtgaga tcttgcatga 420  
ctcactttgt ttccaaaacc cggggctatt ttgcatctca agtttcctgg ggcctgcttc 480  
ctgtgtacca ctttaagggcn nctgggccaa gactgt 516

&lt;210&gt; 801

&lt;211&gt; 284

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (6)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (12)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (28)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 801

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cgaccttcgc gtttttatat atatagatat atatagatat atatagatat atatagatat 120  
atatagatat atatagatat agatatatat agatatatat agatatatat agatatatat 180  
atatagatat atatagatat atatagatat atatagatat atatagatat atatagatat 240  
atatagatat atagatatat atatatctgg ctcatgcatg aaaa 284

&lt;210&gt; 802

&lt;211&gt; 153

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (46)

&lt;223&gt; n equals a,t,g, or c

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<223> n equals a,t,g, or c

<220>  
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<222> (119)  
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<223> n equals a,t,g, or c

<220>  
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<222> (143)  
<223> n equals a,t,g, or c

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cgaagccacc atccccaccc tgtcttccac anccgcctga aagccacaat gagaatgant 120  
cacactgagg cctngatgtn ctntaatcac ttg 153

<210> 803  
<211> 383  
<212> DNA  
<213> Homo sapiens

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<222> (271)  
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<220>  
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<223> n equals a,t,g, or c

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<220>  
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<222> (375)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (383)  
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atttgtcctt tattttatga gccccagttt tctgggctta gtttaaaaaa aaaatcaagt 120  
ctaaacattg catttagaaa gcttttgttc ttggataaaa agtcatacac tttaaaaaaa 180  
aaaaaaactt tttccaggaa aatatattga aatcatgctg ctgagcctct attttctttc 240  
tttgatggtt ttggattcag tattccttta nccataaatt tttagcattt aaaaattcac 300  
nggatggtac attaagccaa taaactggct ttaatggatt acccaaaaaa aaaaaaaaaa 360  
aaaggggggn cgcnnagag ggn 383

<210> 804  
<211> 509  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (399)  
<223> n equals a,t,g, or c

<220>  
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<222> (401)  
<223> n equals a,t,g, or c

<220>  
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<222> (434)  
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<220>  
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<222> (478)  
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<220>  
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<222> (501)  
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<220>  
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<222> (504)  
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ctctggagct cagcacagcc ctggagcacc agnggtacat tacttttctt gaagacctca 120  
agagttttgt caagagccag tagagcagac agatgctgaa agccatagtt tcatggcagg 180  
ctttggccag tgaacaaatc ctactctgaa gctagacatg tgctttgaaa tgattatcat 240  
cctaatatca tgggggaaaa aataccagat ttaaattata tgttttgtgc tctcatttat 300  
ttatcatttt tttctgtaca aatctattat ttctaggttt ttgtattaca tgatagacat 360  
aaattggggt atctcctcca ggagtttgt cttttcnant nctccccctt caaccgtgtc 420  
acaaagacca gacngtgtcg ggaaagtttt ttttctccgt attgttaaag gttccatnca 480  
attaggttta ataaaggctt nttntccag 509

<210> 805  
<211> 753  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (1)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (648)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (668)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (718)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (736)

<223> n equals a,t,g, or c

<400> 805

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ataggcgata gaaattgaaa cctggcgcaa tagatatagt accgcaaggg aaagatgaaa 120
aattataacc aagcataata tagcaaggac taacccttat accttctgca taatgaatta 180
actagaaata actttgcaag gagagccaaa gctaagaccc ccgaaaccag acgagctacc 240
taagaacagc taaaagagca caccctgcta tgtagcaaaa tagtggaag atttataggt 300
agaggcgaca aacctaccga gcctgggtgat agctggttgt ccaagataga atcttagttc 360
aactttaaat ttgccacag aacctcttaa atcccttgt aaatttaact gttagtccaa 420
agaggaacag ctctttggac actaggaaaa aacctttag agagagtaaa aaatttaaca 480
cccatagtag gcctaaaagc agccaccaat taagaaagcg ttcaagctca acaccacta 540
cctaaaaaat cccaaacata taactgaact cctcacacc aattggacca atctatcacc 600
ctatagaaga actaatggta gtataagtaa catgaaaaca ttctcctncg cataagcctg 660
cgtcaganta aaacctgact gacaattaac agcccaattc tacaatcaaa caacaagnca 720
ttattaccct tactgncaac ccaaccaggc atg 753

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<210> 806

<211> 404

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (11)

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<220>

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<222> (352)

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<220>

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<222> (383)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (396)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (398)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (403)

<223> n equals a,t,g, or c

<400> 806

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aaactaaagc tgaagaggta ctttccataa atacctccca ctgattgaat cagtgtcttt 120
aaagaaatth ctcaatcctt cagccgggtga tagcacgttc ttaatgtctc tttttattgc 180
ctgtaatgth attgcagatc cacatctctc gctcaactgt taatgtctca acctccagag 240
gcacccacc cagcacactg tcagtaaagg ggcagaatga aacagtgaga gttaagggtta 300
caggaagaaa atttgcatgt ttgcaagtga ctagaatcag atagtaagtg gnggtgggtt 360
ttttttttta atcattatga aanagtggga agcttngnag gttna 404
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<210> 807

<211> 428

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (17)

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<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (89)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (164)

<223> n equals a,t,g, or c

<220>  
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<222> (198)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (215)  
<223> n equals a,t,g, or c

<220>  
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<222> (258)  
<223> n equals a,t,g, or c

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<222> (266)  
<223> n equals a,t,g, or c

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<222> (283)  
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<220>  
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<222> (400)  
<223> n equals a,t,g, or c

<220>  
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<222> (413)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (417)  
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<220>  
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<222> (423)  
<223> n equals a,t,g, or c

<220>  
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<222> (426)  
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<400> 807

750

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aggcagatgc tcctctggtg ggaggggtgnt ggcccggcaa gattgaagga tgtgcagggc 120
ttcctctcag agccgcccaa actgccttga tgtgtggagg ggangcaaga tgggtaaggg 180
ctcaggaagt tgctccanga acagtagctg atganctgcc cagagtgcct ggctccagcc 240
tgtacccttg gtatgccntg aacatntggt ttccccaccc aantgcggct aagtctcttt 300
ttccttgat cagccaggcg aaattggggc ttgacaagg aattttctaa ggaaaccttg 360
ttaaccagac aaaacacaac cagggttaca gggggtatgn aagggttttc tgncccngga 420
ggnttnag 428
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&lt;210&gt; 808

&lt;211&gt; 403

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (2)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (34)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (62)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (85)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (257)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (258)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (261)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature



<222> (265)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (270)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (286)  
 <223> n equals a,t,g, or c

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 <222> (346)  
 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

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<220>  
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<400> 808  
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 cnccgcctccg gggacagtgc caggngggga gtttgactgg ggcggtacac ctgtcaaacg 120  
 gtaacgcagg tgtcctaagg cgagctcagg gaggacagaa acctcccggtg gagcagaagg 180  
 gcaaaaagctc gcttgatctt cattttcagt acgaatacag accgtgaaaag ccggggcctca 240  
 cgatccctcct gaccttnncg ntttncagcn ggaggtgtca gaaaantnac cacagggata 300  
 actcgtttgt cgcggccaag cgttcatagc gacgtcgtt tnccangtnc gatgtcggat 360  
 cttcntatca ttgtnaagca gaattcacca agcgttggat tgt 403

<210> 809  
<211> 583  
<212> DNA  
<213> Homo sapiens

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<220>  
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<220>  
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 <223> n equals a,t,g, or c

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<220>  
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 <222> (581)  
 <223> n equals a,t,g, or c

<220>  
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 ttggaagacc acttggtgtg ttcacaaaac cagaagtaat tacaggggtg tcctgaaaag 120  
 ccccatagtg attgagtcct caaaaccacc gattctgaga gcaaggaaga ttttggaaga 180  
 aaatctgact gtggattatg acaaagatta tcttttttct taagtaatct atttagatcg 240  
 ggctgactgt acaaatgact cctggaaaaa actcttcacc tagtctagaa taagggaggt 300  
 gggagaatga tgacttacct tgaagtcctt cccttgactg cccgcactgg ggccctgttct 360  
 gtgccctggg agcatnntgc ccagctaagt ggggttcagg cagtgggcag ctttcccaat 420  
 nantcgattt ccatnccagn gganttaaaa ccagttggcc aaatttccaa gnccttgnaa 480  
 ntaaggantc catttaccac cccgcggttt tgtggtcagt gcccgaaggg ggtaggttga 540  
 aggggggctta acaaacatgg aagtnggggg nanaagggat nan 583

<210> 810  
 <211> 272  
 <212> DNA  
 <213> Homo sapiens

<220>  
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<220>  
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

<220>  
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gtatacagat gaggggtgcc gctgctgctt tccttcggaa tccagtgttt ccacagagat 120  
tancctgtan cttatatattg acattcttca ctgtctgttg ttnancnacc gtagcttttt 180  
accgttcact tccccctcca actatgtcca gatgtgcagg ctccctcnct ctggactttc 240  
tccaaaggca ctgaccctng gnetnnactt tg 272

<210> 811  
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<212> DNA  
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<220>  
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<222> (259)  
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<220>  
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<223> n equals a,t,g, or c

<220>  
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<222> (280)  
<223> n equals a,t,g, or c

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cagatctttt taaaagata cttctgtaac ttaagaaacc tgggcattta aatcatattt 120  
tgtcttttagg taaaagcttt ggtttggtgt cgtgttttgt ttgtttcact tgtttccctc 180  
ccagccccaa accttttggt ctctccgtga acttaccttt ccctttttct ttctcttttt 240  
tttttttgga anattaatng tttncataa aatttncatn gccattaaaa aaaaaaaaaa 300

<210> 812  
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<212> DNA  
<213> Homo sapiens

<220>  
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<220>  
<221> misc feature  
<222> (294)  
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<222> (468)

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gaaattgaaa cctggcgcaa tagatatagt accgcaaggg aaagatgaaa aattatagcc 120
aagcataata tagcaaggac taacccttat accttctgca taatgaatta actagaaata 180
actttgcaag gagagccaaa gctaagacct ccgaaaccag acgagctacc tnagaacagc 240
tgaaagagca caccgtcta ttagcaaaa tagtgggaag atttataggt tgangcgaca 300
aacctaccga gcctggtgat agctngttgt tccaanattg aatccttagt tccactttta 360
atttgcccc aaaaaccccc taattccctt tgggttaattt taactgttng tccccaaaaa 420
ggaaccngct ctttgggacc cttanggaaa aaaacottgn ttaaaaaaa ttaaaaaa 478
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<210> 813

<211> 63

<212> DNA

<213> Homo sapiens

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<222> (50)

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<222> (57)

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<222> (59)

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<400> 813

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tga 63
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<210> 814  
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<212> DNA  
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<220>  
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gagggtcctg ctg 73

<210> 815  
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<222> (93)  
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<210> 816  
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cagtacctaa caaaccaca ggtcctaacc taccaaacct gcattaaaaa tttcggttg 180

760

ggcgacctcg gagcagaacc caacctccga gcagtacatg ctaagacttc accagtcaaa 240  
gcgaactact atactcaatt gatccaataa cttgaccaac ggaacaagtt accctaggga 300  
taacagcgca atcctattct agagtccata tcaacaatan ggtttacnac ctcgatgnnn 360  
ggatcaggac attccaatg 379

&lt;210&gt; 817

&lt;211&gt; 500

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (148)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (158)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (185)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (192)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (201)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (215)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (238)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (240)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

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<400> 817

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ctccccacag cccgccaaaga agcgacangg cccaagncc cgagccggcc gtcaagggga 180
ccggngtggtc tngggttgct naagaaagcg gaatncgggg ggcatcccag ccaagaangn 240
cccggtgggg naggagaanc tngggaacgc cggcctcctt ggncgctgaa ttncgaaca 300
ttttggaacc ggattccaga ggaacaaagg gcccgnggnc cttgnttaan aatncggggg 360
ccngnaaang ttncctcttg gggntttttg gaanaanaac ctgggaaaga aagcanctta 420
aggggggggn attttcgggg gaaancgtta tttttaatca aagctaaatt ggggattttt 480
tttncaaaaa ggaaaggaaa                               500
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<211> 329

<212> DNA

<213> Homo sapiens

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<222> (45)

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tgatcccccg ggctgcagga attcggcncg agaggaaana gaaaccgtct gaactatgct 180  
gnnngccatc atnctnggcc tcacgcgnnt tccatcccta cgcattgcttt acatagcana 240  
cgaggtgacg atgccnccct taccatcaag atcanttgnc caccaatggt acttgaacct 300  
acgagtacac ccgaccaccn ggtggacta 329

<210> 819  
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<212> DNA  
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<222> (547)  
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attacaaata aacagttggt acttagcaag acctgaaaat atgtctgcag gtttctcctt 180  
gaagcaaatt tgtgggatca ttgcatttcc agaaatctgc ctccttcacc ctccgttgac 240  
agtatatgtc atgcctcact ttcttctagc tgagctttaa atcattagag cttaaattgt 300  
cagatcggtc attgcctttc cagggttatt tagtaaaagt tggttgaaaac aaaaacgcct 360  
tttcttggtt cttttttcag ttattttgaa ggccagcatc ctgattaaat gctgacacat 420  
taatgaatga ccagcaacag ctttcagctc ttaaaaaagac acttatattt gaatttacat 480  
gctgggtacc tgggtccaat ggtggcaaaa ggccactntt cattaaaagg ggtcctccat 540  
ttctantccc caaggacttc ctcanttttc aaattgggaa gggnacctaa aagggggtac 600  
aattaaaacc ctgggggtaaa gggggnaaaa aaaaaaaaaa aaaaaaaaaa 648

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<212> DNA  
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<220>  
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<220>  
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<223> n equals a,t,g, or c



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<400> 820  
gccactccac cttactacca gacaacctta gccaaaccat ttacccaaat aaagtatagg 60  
cgatagaaat tgaaacctgg cgcaatagat atagtaccgc aagggaaga tgaaaaatta 120  
taaccaagca taatatagca aggactaacc cctatacctt ctgcataatg aattaactag 180  
aaataacttt gcaaggagag ccaaagctaa aacccccaat aaaccttgaa cagtgaanaa 240  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaacctcgag gtcnacggta tcnataacct 300  
tgatatcnaa ttcggcacna gcaaccctca ttccccaacc cacgccggag gctgcgcctg 360  
caggacctgn ctgaccgatt ggtggatcct ctgaanatga acacgactca ccaactgctca 420  
ncgaggcntg cttgagcaaa atccgccaat tataaaaaaa aaacnctcc 469

<210> 821  
<211> 432  
<212> DNA  
<213> Homo sapiens

<220>

<221> misc feature  
<222> (344)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (385)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (419)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (422)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (425)  
<223> n equals a,t,g, or c

<400> 821  
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ttgcacgctc tttaagagtc tgcactggag gaactctgcc attaccagct cccttgttgc 120  
agaagggaagg ggaaacatac atttattcat gccagtctgt tgcattgcagg ctttttggct 180  
tcctaccttg caacaaaata attgcaccaa ctcttagtg ccgattccgc ccacagagag 240  
tcctggagcc acagtctttt ttgctttgca ttgtaaggag agggactaaa gtgctagaga 300  
ctatgtcgtc ttcctgagct aacgagagcg ctcgtgaact ggantcaact gctttcaggg 360  
aaaaagaaaa aaaaaaaaaa aaanccggg ggggggcccg gtaaccatt tccccctana 420  
gnggnggggt tt 432

<210> 822  
<211> 428  
<212> DNA  
<213> Homo sapiens

<220>  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (367)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (382)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (385)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (425)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (427)

<223> n equals a,t,g, or c

<400> 822

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tcattagtga aagtgggtctt ttatgtcctc ccagcagaca gacatcaagg atgagttaac 120
caggagacta ctccctgtgga ctgtggagct ctggaaggct tgggtgggagt gaatttgccc 180
acaccttaca attgtggcag gatccagaag agcctgtctt tttatatcca ttccttggat 240
gtcattgggc ctctcccacc gatttcatta cggtgccacg catccatggg atctggggta 300
gtccggaaaa acaaaaggag ggnagacagc ctggtaatgg ataagatcct taccacagtt 360
ttcccanggg gaatacctta tnaanccttc aacttttttt tttcccttaa gaattaaaac 420
gggnana                                         428
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<210> 823

<211> 100

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (54)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (63)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (71)

770

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (78)

<223> n equals a,t,g, or c

<400> 823

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agntgaccca ntctcgncc ctccctgtct gcagctggta 100

<210> 824

<211> 173

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (79)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (111)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (117)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (156)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (165)

<223> n equals a,t,g, or c

<400> 824

cggacgcgtg ggcggacgcg tgggaggacg cgtggggcca gaaccacagg tgtacaccct 60  
gccccatcc cgaggagana tgaccaagaa acagtcagct gaactgcctg nttctanagg 120  
tttctatccc acgaaatccc cttgaattgg gaaacnattg ggcancgaa aaa 173

<210> 825

<211> 341

<212> DNA

<213> Homo sapiens

771

<220>  
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<220>  
<221> misc feature  
<222> (313)  
<223> n equals a,t,g, or c

<220>  
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<222> (317)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (335)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (339)  
<223> n equals a,t,g, or c

<400> 825  
cccaaacc ca ctccacctta ctaccagaca accttagcca aaccatttac ccaaataaag 60  
tataggcgat agaaattgaa acctggcgca atagatatag taccgcaagg ggaaagatga 120  
aaaattataa ccaagcataa tatagcaagg actaaccctt ataccttctg cataatgaat 180  
taactagaaa taactttgca aggagagcca aagctaagac ccccgaaacc agaacgagct 240  
accttagaac agcttaaaga gcacaccctt ctatttttgc canaatagtg ggaaagattt 300  
atagggtgaa ggnaacnaac ctaccgagcc tggtnaatnc t 341

<210> 826  
<211> 492  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (337)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (416)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (446)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (471)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (480)

<223> n equals a,t,g, or c

<400> 826

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gcaaaccac tccaccttac taccagacaa ccttagccaa accatttacc caaataaagt 60
ataggcgata gaaattgaaa cctggcgcaa tagatatagt accgcaaggg aaagatgaaa 120
aattataacc aagcataata tagcaaggac taacccttat accttctgca taatgaatta 180
actagaaata actttgcaag gagagccaaa gctaagaccc ccgaaaccag acgagctacc 240
taagaacagc taaaagagca caccctgtcta tgtagcaaaa tagtgggaag atttataggt 300
agaggcgaca aacctaccga gcctgggtgat agctggntgt ccaagataga atcttagttc 360
aactttaaat ttgccacag aacctcttaa atccccttgt aaatttaact gttagnccaa 420
agaggaacaa gctctttgga cactangaaa aaaccttgta tagagaggaa naaanatttn 480
acaaccata ct 492
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<210> 827

<211> 290

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (59)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (230)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (250)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (262)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (264)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (290)

<223> n equals a,t,g, or c

<400> 827

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ggtcgtgctc tcccggggccg ggtccgagcc gcgacgggcg agggggcggac gttcgtggng 60
aacggggaccg tccttctcgc tccgccccgc ggggggtcccc tcgtctctcc tctccccgcc 120
cgccggcggt gcgtgtggga aggcgtgggg tgcggacccc ggcccgcacct cgccgtcccc 180
cccgcgcct tctgcgtcgc gggtgcgggc cggcggggtc ctctgacgen gcagacagcc 240
ctcgtgtcnc cctccagtgg angncgactt gcgggcggta ctccctacgan 290
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<210> 828

<211> 420

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (149)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (334)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (382)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (396)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (403)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (405)

<223> n equals a,t,g, or c

<400> 828

gggtcgaccc acgctccgg cagcacggaa aaagaaggtc tcctccacga agcgacactg 60  
agcgtgcacc aagggttgg tctgcggggg ccttgagct cctgctcttc tcccgacact 120  
ccatggatgc actgctgccc agcagagcng cctctgccag gccccgccct gggattccta 180  
gagactagct tcagttttgc tttttttttt aagtgggaga aggggtgggca gttatcactg 240  
gggaagagag gaccggccac ctgtccagca tgggtccag agccttcctc tctcacaggg 300  
cagagtcttg tcggcaaggc agcctcctgg ccantttctc tgctcatgtt tctggtttagc 360  
agagttcaga gccaatgtt tnacttcttg gttgtncctg tgnangaagc ctttcaaaac 420

<210> 829

<211> 298

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (30)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (56)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (109)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (125)

<223> n equals a,t,g, or c



<220>  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (171)  
<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<222> (191)  
<223> n equals a,t,g, or c

<220>  
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<222> (267)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (268)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (269)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (281)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (287)  
<223> n equals a,t,g, or c

<400> 829  
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tgagagtga caaatgggtg acaggtagct ggggacctag gctatctcnc catgaagggt 120  
gttcngctna ttgtatatct gtgtatgtag tgtaactata ttgtacaatg ngaagactgt 180  
naactactat ntaggggtgt tgcagattga aatttagttg tctcattggc tgtctgagga 240

agtgtggact tctatatata gatctannnt gaaaactgct ncatgantga aaaccaca 298

<210> 830

<211> 516

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (408)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (477)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (497)

<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (513)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (515)  
<223> n equals a,t,g, or c

<400> 830  
ncggnaactn ctactatag ntgaaagctg gtacnccctgc aggtaccggt ccggaattcc 60  
cgggggcatc cccttgtoce caagagaccc gacgcttgct tcatggccta cacgttcgag 120  
agagagtctt cgaggagga ggaggagtag ggccgcctcg gggctgggca tccggcccct 180  
ggggccaccc cttgtcagcc ggggtgggtag gaaccgtaga ctgcctcatc tcgcctgggt 240  
ttgtccgcat gttgtaatcg tgcaataaaa cgctcactcc gaattagcgg tgtatttctt 300  
gaagttaaatt attgtgtttg tgatactgaa gtatttgctt taattctaaa taaaaattta 360  
tattttactt ttttattgct ggtttaagat gattcagatt atccttgnac tttgaggaga 420  
agtttcttat ttggagcttt tggaacagc ttaagctttt aacttggaat gatagnatt 480  
aatccccctc attggtntcc aaaagccaat aangng 516

<210> 831  
<211> 636  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (414)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (453)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (530)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (617)  
<223> n equals a,t,g, or c

<400> 831  
ggaaaaaat gagttccatt taaaattttg gcatatggca ttttctaact taggaagcca 60  
caatgttctt ggcccatcat gacattgggt agcatctaact gtaagttttg tgcttccaaa 120  
tcactttttg gtttttaaga atttcttgat actcttatag cctgccttca attttgatcc 180

tttattcttt ctatttgta ggtgcacaag attaccttcc tgttttagcc ttctgtcttg 240  
tcaccaacca ttcttacttg gtggccatgt acttggaata aggccgcatg atctttcttg 300  
ctccactcag tgtctaaggc accctgcttc ctttgcttgc atcccacaga ctatttcctt 360  
catcctattt actgcagcaa atctctcctt agttgatgag actgtgttta tctnccttta 420  
aaaccctacc tatcctgaat ggtctgtcat tgnctgcctt taaaatcctt cctctttctt 480  
cctcctctat tctctaaata atgatggggc ttaagttata cccaaagctn actttacaaa 540  
atatttcctc aagactttgc agaaacacca acaaaatgcc atttaaaaaa ggggattttc 600  
tttaaaggaa ctctaanaca ggcaagggtc tgatgt 636

<210> 832

<211> 466

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (421)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (443)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (446)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (453)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (466)

<223> n equals a,t,g, or c

<400> 832

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agttccctcc ttcttacaga agtatttta ttcacccac actagaaatg cagcatcttt 120  
gtggacgtct ttttcacaag cctccaaggc tccttagatt gggtcggtac taaaagtaca 180  
ttaaaacact cttggtttatc gaagtatatt gatgtattct aaagctagta aacttcctta 240  
acgtttaatt gccctacaga tgcttctctt gctgtgggtt ttcttttggt agtgggtctga 300  
aataattatt ttcctgttct attaatatcat aagtgtattt tgcacaaaaa aattaacctg 360  
gtcaaatagt gattacaaa atatatatta ataatcttgg gcaaattttt gccatttata 420  
ngaaaacatt ttaacccac ggntangtto tanatttatt ctttcn 466

<210> 833

<211> 405

<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (237)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (278)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (335)  
<223> n equals a,t,g, or c

<400> 833  
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gggaggagtc tgtgcagttt ctgacacttg ttgttgaaca tggctaaata caatgggtat 120  
cgctgagact aagttgtaaa aaattaacaa atgtgctgct tggttaaaat ggctacactc 180  
atctgactca ttctttattc tattttagtt ggtttgatc ttgcctaagg tgcgtantcc 240  
aactcttggt attaccctcc taatagtcac actagtantc atactccctg gtgttatgta 300  
ttctctaaaa gctttaaatg tctgcattgc aaccngccat caaatattga atgggctctc 360  
ttttggctgg aattacaaac tcaaaaaatg tttctcagga aaaaa 405

<210> 834  
<211> 402  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (277)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (332)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (354)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (359)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (390)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (400)  
<223> n equals a,t,g, or c

<400> 834  
gcaaaccac aggtcctaaa ctaccaaacc tgcattaaaa atttcggttg gggcgacctc 60  
ggagcagaac ccaacctccg agcagtacat gctaagactt caccagtcaa agcgaactac 120  
tatactcaat tgatccaata acttgaccaa cggaacaagt taccctaggg ataacagcgc 180  
aatcctattc tagagtccat atcaacaata gggtttacga cctcgatggt ggatcaggac 240  
atcccgatgg tgcagccgct attaaagggt cgtttgntca acgattaaag toctacgtga 300  
tctgagttca gaccggagta atccagggtc gnttctatct acttcaaatt cctncctgna 360  
cgaaaggaca agagaaataa gggtacttn acaaagcgcn tt 402

<210> 835  
<211> 121  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (1)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (4)  
<223> n equals a,t,g, or c

<220>  
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<222> (40)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (77)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (100)  
<223> n equals a,t,g, or c

<220>

<221> misc feature  
<222> (110)  
<223> n equals a,t,g, or c

<220>  
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<222> (117)  
<223> n equals a,t,g, or c

<400> 835  
nttnaaaaaa aaaaaaaaaa aaaaaaaaaa aagaaaaaan aaaaaaaaaa aaaaaaaaaa 60  
aaaaagggcg gccgttntaa aggatccaag cttacgtacn cgtgcatgcn acgtcanagc 120  
t 121

<210> 836  
<211> 411  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (340)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (344)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (357)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (386)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (408)  
<223> n equals a,t,g, or c

<400> 836  
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acttgtggtt gggtcagtgc cgcgcgccgc tcggtcggtta ccgcgaggcg ctggtggcct 120  
tcaggctgga cggcgcgggt cagccctggt ttgccggctt ctgggtcttt gaacagccgc 180  
gatgtcgatc ttcaccccca ccaaccagat ccgcctaacc aatgtggccg tggtagcgat 240  
gaagcgcgcc aggaagcgct tcgaaatcgc ttgctacaga aacaagtcgt cggctggcgg 300  
agggctttgg aaaaagactt gatgaatttt gcagaccan caangtttgt aaagttacca 360

782

aagtcagttt ccaaaaggaa attcancagg ggtttggaat atgccaanga a 411

<210> 837

<211> 386

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (381)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (383)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (384)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (385)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (386)

<223> n equals a,t,g, or c

<400> 837

gcggcagctc agcaagtggg ggaccaggcc acagaggcgg ggcagaaagc catggaccag 60  
ctggccaaga ccaccagga aaccatcgac aagactgcta accaggcctc tgacaccttc 120  
tctgggatcg ggaaaaaatt cggcctcctg aaatgacagc agggagactt gggtcggcct 180  
cctgaaatga tagcagggag acttgggtga ccccccttc aggcgccatc tagcacagcc 240  
tggccctgat ctccgggcag ccaccacctc ctcggtctgc cccctcatta aaattcacgt 300  
tccccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360  
aaaaaaaaa aaaaaaaaaa ngnnnn 386

<210> 838

<211> 124

<212> DNA

<213> Homo sapiens

<400> 838

gctttcaata gatcgagcg agggagctgc tctgctacgt acgaaacccc gacccagaag 60  
caggtcgtct acgaatgggt tagcgccagg ttccccacga acgtgcggtg cgtgacgggc 120  
gagg 124



<210> 839  
<211> 270  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (26)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (56)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (107)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (130)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (175)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (178)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (250)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (260)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (261)  
<223> n equals a,t,g, or c

<400> 839

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atctggttgt gggtacaatg aaaatnagaa gcattattga tggattcgca taagcncaat 60
gtgatgtcct gcgccgttct gccccctctc ccttccaggg tgaggggctg gggtgagggt 120
taatgttcgn accagtgtcg gctgttcccc tcaccctaac cctctcccca aaggncgnag 180
gggcccgggtt acccaattcg ccctatagtg agtcgtatta caattcactg gccgtcgttt 240
tacaagacgn agggaggagn ntgatgaaaa 270
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<210> 840

<211> 430

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (210)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (262)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (263)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (348)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (369)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (390)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (395)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (409)

<223> n equals a,t,g, or c

<400> 840  
 ctctacatca cgcgccccgac cttagctctc accatcgctc ttctactatg aacccccctc 60  
 cccataccca accccctggg caacctcaac ctaggcctcc tatttattct agccacctct 120  
 agcctagccg tttactcaat cctctgatca ggggtgagcat caaactcaaa ctacgcccctg 180  
 atcggcgcac tgcgagcagt agcccaaach atctcatatg aagtcaccct agccatcatt 240  
 cctactatca acattactaa tnngttggct cctttaacct ctccaccctt atcacaacac 300  
 aagaacactc ctgaatatcc tgccatcata accctttggc catatatnat tatcttccac 360  
 actagggana acaacgaacc cccttcgaan cttgngaaag ggaatttcna ataatttca 420  
 ggttcaaatt 430

<210> 841  
 <211> 650  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (519)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (555)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (564)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (573)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (589)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (634)  
 <223> n equals a,t,g, or c

<400> 841  
 gccgtcatct actctaccat ctttgcaggc aactcatca cagcgctaag ctgcactga 60  
 ttttttacct gagtaggcct agaaataaac atgctagctt ttattccagt tctaaccaaa 120  
 aaaataaacc ctcgttccac agaagctgcc atcaagtatt tcctcacgca agcaaccgca 180  
 tccataatcc ttctaatagc tatectcttc aacaatatac tctccggaca atgaaccata 240  
 accaataata ccaatcaata ctcatcatta ataatacataa tggctatagc aataaaaacta 300

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ggaatagccc cctttcactt ctgagtccca gaggttaccc aaggcacccc tctgacatcc 360
ggcctgcttc ttctcacatg acaaaaacta gcccccatct caatcatata ccaaattctct 420
ccctcactag acgtaagcct tctcctcact ctctcaatct tatccatcat agtaggcagt 480
tgaggggtgga ttaaaacaaa acccagctac gcaaaatcnt agcatacttc ctcaattacc 540
cacataggat gaatnaatag cagntttctac cgnacaaccc ttacataanc atttcttaaa 600
ttaactaatt atattaatcc taactactac ggantctact actaacttaa 650

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<210> 842

<211> 509

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (438)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (455)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (462)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (468)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (482)

<223> n equals a,t,g, or c

<400> 842

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gcctgtgtct gctaaaaaag aaaagaaagt ttcctgcatg ttcattcctg atgggcgggt 60
gtctgtctct gctcgaattg acagaaaagg attctgtgaa ggtgatgaga tttccatcca 120
tgctgacttt gagaatacat gttcccgaat tgtggtcccc aaagctgcca ttgtggcccg 180
ccacacttac cttgccaatg gccagaccaa ggtgctgact cagaagttgt catcagtcag 240
aggcaatcat attatctcag ggacatgcgc atcatggcgt ggcaagagcc ttcgggttca 300
gaagatcagg cttcttatcc tgggctgcaa catccttcga gttgaatatt ccttactgat 360
ctatgttagc gttcctggat ccaagaaggt catccttgac ctgcccctgg taattggcag 420
cagatcaggt ctaagcanca gaacatccag ctggncagcc cnaaccanct ctgaagatga 480
gntgggtaga tctgaacatc ctgataccc 509

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<210> 843

<211> 158

<212> PRT

<213> Homo sapiens

<400> 843

Lys Arg Asp Trp Val Ile Pro Pro Ile Ser Cys Pro Glu Asn Glu Lys  
1 5 10 15

Gly Pro Phe Pro Lys Asn Leu Val Gln Ile Lys Ser Asn Lys Asp Lys  
20 25 30

Glu Gly Lys Val Phe Tyr Ser Ile Thr Gly Gln Gly Ala Asp Thr Pro  
35 40 45

Pro Val Gly Val Phe Ile Ile Glu Arg Glu Thr Gly Trp Leu Lys Val  
50 55 60

Thr Glu Pro Leu Asp Arg Glu Arg Ile Ala Thr Tyr Thr Leu Phe Ser  
65 70 75 80

His Ala Val Ser Ser Asn Gly Asn Ala Val Glu Asp Pro Met Glu Ile  
85 90 95

Leu Ile Thr Val Thr Asp Gln Asn Asp Asn Lys Pro Glu Phe Thr Gln  
100 105 110

Glu Val Phe Lys Gly Ser Val Met Glu Gly Ala Leu Pro Gly Thr Ser  
115 120 125

Val Met Glu Val Thr Ala Thr Asp Ala Asp Asp Gly Cys Gly Thr Pro  
130 135 140

Thr Met Pro Pro Ser Leu Thr Pro Ser Ser Ala Gln Asp Pro  
145 150 155

<210> 844

<211> 601

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE  
 <222> (103)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (106)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (152)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
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 <221> SITE  
 <222> (358)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (383)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 844  
 Thr Glu Leu Leu Lys Ser Ala Ala Arg His Gly Thr Ala Glu Ser Ala  
   1                  5                  10                  15  
 Pro Trp Pro Arg Gly Gln Gly Trp Gln Gln Trp Gln Gln Gln Trp Arg  
                   20                  25                  30  
 Arg Arg Trp Xaa Ser Trp Arg Lys Asp Arg Ala Arg Thr Arg Arg Gln  
           35                  40                  45  
 Glu Glu Leu Ala Leu Ser Gln Glu Pro Lys Ser Ser Ser Arg Gly Xaa  
   50                  55                  60  
 Ser Pro Gly Ala Ser Pro Ala Ser Pro Thr Ser Gln Gln Phe Cys Cys  
   65                  70                  75                  80  
 Phe Arg Leu Asp Gln Val Ile His Ser Asn Pro Ala Gly Ile Gln Gln  
                   85                  90                  95  
 Ala Leu Ala Gln Leu Ser Xaa Arg Gln Xaa Ser Val Thr Ala Pro Gly  
           100                  105                  110  
 Gly His Pro Arg His Lys Pro Gly Pro Pro Gln Ala Pro Gln Gly Pro  
   115                  120                  125  
 Ser Pro Arg Pro Pro Thr Arg Tyr Glu Pro Gln Arg Val Asn Ser Gly  
   130                  135                  140

789

Leu Ser Ser Asp Pro His Phe Xaa Glu Pro Gly Pro Met Val Arg Gly  
145 150 155 160

Val Gly Gly Thr Pro Arg Asp Ser Ala Gly Val Ser Pro Phe Pro Pro  
165 170 175

Lys Arg Arg Glu Arg Pro Pro Arg Lys Pro Glu Leu Leu Gln Glu Glu  
180 185 190

Ser Leu Pro Pro Pro His Ser Ser Gly Phe Leu Gly Ser Lys Pro Glu  
195 200 205

Gly Pro Gly Pro Gln Ala Glu Ser Arg Asp Thr Gly Thr Glu Ala Leu  
210 215 220

Thr Pro His Ile Trp Asn Arg Leu His Thr Ala Thr Ser Arg Lys Ser  
225 230 235 240

Tyr Arg Pro Ser Ser Met Glu Pro Trp Met Glu Pro Leu Ser Pro Phe  
245 250 255

Glu Asp Val Ala Gly Thr Glu Met Ser Gln Ser Asp Ser Gly Val Asp  
260 265 270

Leu Ser Gly Asp Ser Gln Val Ser Ser Gly Pro Cys Ser Gln Arg Ser  
275 280 285

Ser Pro Asp Gly Gly Leu Lys Gly Ala Ala Glu Gly Pro Pro Lys Arg  
290 295 300

Pro Gly Gly Ser Ser Pro Leu Asn Ala Val Pro Cys Glu Gly Pro Pro  
305 310 315 320

Gly Ser Glu Pro Pro Arg Arg Pro Pro Pro Ala Pro His Asp Gly Asp  
325 330 335

Arg Lys Glu Leu Pro Arg Glu Gln Pro Leu Pro Pro Gly Pro Ile Gly  
340 345 350

Thr Glu Arg Ser Gln Xaa Thr Asp Arg Gly Thr Glu Pro Gly Pro Ile  
355 360 365

Arg Pro Ser His Arg Pro Gly Pro Pro Val Gln Phe Gly Thr Xaa Asp  
370 375 380

Lys Asp Ser Asp Leu Arg Leu Val Val Gly Asp Ser Leu Lys Ala Glu  
385 390 395 400

Lys Glu Leu Thr Ala Ser Val Thr Glu Ala Ile Pro Val Ser Arg Asp  
405 410 415

790

Trp Glu Leu Leu Pro Ser Ala Ala Ala Ser Ala Glu Pro Gln Ser Lys  
 420 425 430

Asn Leu Asp Ser Gly His Cys Val Pro Glu Pro Ser Ser Ser Gly Gln  
 435 440 445

Arg Leu Tyr Pro Glu Val Phe Tyr Gly Ser Ala Gly Pro Ser Ser Ser  
 450 455 460

Gln Ile Ser Gly Gly Ala Met Asp Ser Gln Leu His Pro Asn Ser Gly  
 465 470 475 480

Gly Phe Arg Pro Gly Thr Pro Ser Leu His Pro Tyr Arg Ser Gln Pro  
 485 490 495

Leu Tyr Leu Pro Pro Gly Pro Ala Pro Pro Ser Ala Leu Leu Ser Gly  
 500 505 510

Val Ala Leu Lys Gly Gln Phe Leu Asp Phe Ser Thr Met Gln Ala Thr  
 515 520 525

Glu Leu Gly Lys Leu Pro Ala Gly Gly Val Leu Tyr Pro Pro Pro Ser  
 530 535 540

Phe Leu Tyr Ser Pro Ala Phe Cys Pro Ser Pro Leu Pro Asp Thr Ser  
 545 550 555 560

Leu Leu Gln Val Arg Gln Asp Leu Pro Ser Pro Ser Asp Phe Tyr Ser  
 565 570 575

Thr Pro Leu Gln Pro Gly Gly Gln Ser Gly Phe Leu Pro Ser Gly Ala  
 580 585 590

Pro Ala Ser Arg Cys Phe Tyr Pro Trp  
 595 600

<210> 845

<211> 67

<212> PRT

<213> Homo sapiens

<400> 845

Thr Gln Lys Thr Ser Ser Leu Leu Pro Ala Leu Ser Leu Gln Leu Pro  
 1 5 10 15

Leu Leu Thr Arg Phe Ser Ile Met Cys Ser Val Lys Glu Glu Phe Trp  
 20 25 30



791

Arg Val Gln Ser Ile Ile Thr Glu Leu Val Leu Lys Gly Glu Phe Gly  
35 40 45

Val Glu Glu Ala Met Lys Leu Ile Thr Gly Thr Glu Ala Lys Tyr Lys  
50 55 60

Ser Ile Asp  
65

<210> 846

<211> 146

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 846

Ser Gln Gly Pro Asp His Pro Ser Ser Gln Leu Gln Pro Leu Asn Xaa  
1 5 10 15

Ser Leu Ser His Leu Leu Val Pro Cys Leu Ser Ile Met Ser Leu Leu  
20 25 30

Asn Lys Pro Lys Ser Glu Met Thr Pro Glu Glu Leu Gln Lys Arg Glu  
35 40 45

Glu Glu Glu Phe Asn Thr Gly Pro Leu Ser Val Leu Thr Gln Ser Val  
50 55 60

Lys Asn Asn Thr Gln Val Leu Ile Asn Cys Arg Asn Asn Lys Lys Leu  
65 70 75 80

Leu Gly Arg Val Lys Ala Phe Asp Arg His Cys Asn Met Val Leu Glu  
85 90 95

Asn Val Lys Glu Met Trp Thr Glu Val Pro Lys Ser Gly Lys Gly Lys  
100 105 110

Lys Lys Ser Lys Pro Val Asn Lys Asp Arg Tyr Ile Ser Lys Met Phe  
115 120 125

Leu Arg Gly Asp Ser Val Ile Val Val Leu Arg Asn Pro Leu Ile Ala  
130 135 140

Gly Lys  
145

<210> 847  
<211> 184  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (8)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (179)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 847  
Ala Arg Met Ala Ala Asp Lys Xaa Pro Ala Ala Gly Pro Arg Ser Arg  
1 5 10 15  
Ala Ala Met Ala Gln Trp Arg Lys Lys Lys Gly Leu Arg Lys Arg Arg  
20 25 30  
Gly Ala Ala Ser Gln Ala Arg Gly Ser Asn Ser Glu Asp Gly Glu Phe  
35 40 45  
Glu Ile Gln Ala Glu Asp Asp Ala Arg Ala Arg Lys Leu Gly Pro Gly  
50 55 60  
Arg Pro Leu Pro Thr Phe Pro Thr Ser Glu Cys Thr Ser Asp Val Glu  
65 70 75 80  
Pro Asp Thr Arg Glu Met Val Arg Ala Gln Asn Lys Lys Lys Lys Lys  
85 90 95  
Ser Gly Gly Phe Gln Ser Met Gly Leu Ser Tyr Pro Val Phe Lys Gly  
100 105 110  
Ile Met Lys Lys Gly Tyr Lys Val Pro Thr Pro Ile Gln Arg Lys Thr  
115 120 125  
Ile Pro Val Ile Leu Asp Gly Lys Asp Val Val Ala Met Ala Arg Thr  
130 135 140  
Gly Ser Gly Lys Thr Ala Cys Phe Leu Leu Pro Met Phe Glu Arg Leu  
145 150 155 160  
Lys Thr His Ser Ala Gln Thr Gly Ala Arg Ala Ser Ser Ser Arg Arg  
165 170 175

Pro Glu Xaa Trp Pro Cys Arg Pro  
180

<210> 848

<211> 160

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> xaa equals any of the naturally occurring L-amino acids

<400> 848

Ala Arg Ala Ser Ser Glu Cys Ala Arg Cys Ala Ala Ala Val Arg Thr  
1 5 10 15

Cys Arg Arg Arg His Arg His His Ala Gln Leu Arg Arg His Leu Glu  
20 25 30

Asp Ala Xaa Ser Glu Asn Phe Asp Glu Leu Leu Lys Ala Leu Gly Val  
35 40 45

Asn Ala Met Leu Arg Lys Val Ala Val Ala Ala Ala Ser Lys Pro His  
50 55 60

Val Glu Ile Arg Gln Asp Gly Asp Gln Phe Tyr Ile Lys Thr Ser Thr  
65 70 75 80

Thr Val Arg Thr Thr Glu Ile Asn Phe Lys Val Gly Glu Gly Phe Glu  
85 90 95

Glu Glu Thr Val Asp Gly Arg Lys Cys Arg Ser Leu Ala Thr Trp Glu  
100 105 110

Asn Glu Asn Lys Ile His Cys Thr Gln Thr Leu Leu Glu Gly Asp Gly  
115 120 125

Pro Lys Thr Tyr Trp Thr Arg Glu Leu Ala Asn Asp Glu Leu Ile Leu  
130 135 140

Thr Phe Gly Ala Asp Asp Val Val Cys Thr Arg Ile Tyr Val Arg Glu  
145 150 155 160

794

<210> 849  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (15)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (50)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 849  
 Val Gln Asn Val Gly Tyr Gln Ser Lys His Cys Gly Ala Val Xaa Tyr  
   1                  5                  10                  15  
 Ala Arg Leu Pro Cys Glu Met Ile Gln Asp Gln Asn Lys Ala Leu Asp  
                   20                  25                  30  
 Cys Ser Lys Thr Gln Asn Ser Ser Arg Ala Glu Gly Gly Arg Leu Ile  
           35                  40                  45  
 Trp Xaa Glu Gly Pro Lys Tyr Lys Thr Asp Gly Leu Arg Leu Glu Thr  
       50                  55                  60  
 Arg Gly Leu Arg Trp Lys Ala His Val Pro Arg  
       65                  70                  75

<210> 850  
 <211> 383  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (299)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 850  
 Ser Thr His Ala Ser Ala His Ala Ser Val Ala Asn Glu Val Ile Lys  
   1                  5                  10                  15  
 Cys Lys Ala Ala Val Ala Trp Glu Ala Gly Lys Pro Leu Ser Ile Glu  
           20                  25                  30

795

Glu Ile Glu Val Ala Pro Pro Lys Ala His Glu Val Arg Ile Lys Ile  
 35 40 45  
 Ile Ala Thr Ala Val Cys His Thr Asp Ala Tyr Thr Leu Ser Gly Ala  
 50 55 60  
 Asp Pro Glu Gly Cys Phe Pro Val Ile Leu Gly His Glu Gly Ala Gly  
 65 70 75 80  
 Ile Val Glu Ser Val Gly Glu Gly Val Thr Lys Leu Lys Ala Gly Asp  
 85 90 95  
 Thr Val Ile Pro Leu Tyr Ile Pro Gln Cys Gly Glu Cys Lys Phe Cys  
 100 105 110  
 Leu Asn Pro Lys Thr Asn Leu Cys Gln Lys Ile Arg Val Thr Gln Gly  
 115 120 125  
 Lys Gly Leu Met Pro Asp Gly Thr Ser Arg Phe Thr Cys Lys Gly Lys  
 130 135 140  
 Thr Ile Leu His Tyr Met Gly Thr Ser Thr Phe Ser Glu Tyr Thr Val  
 145 150 155 160  
 Val Ala Asp Ile Ser Val Ala Lys Ile Asp Pro Leu Ala Pro Leu Asp  
 165 170 175  
 Lys Val Cys Leu Leu Gly Cys Gly Ile Ser Thr Gly Tyr Gly Ala Ala  
 180 185 190  
 Val Asn Thr Ala Lys Leu Glu Pro Gly Ser Val Cys Ala Val Phe Gly  
 195 200 205  
 Leu Gly Gly Val Gly Leu Ala Val Ile Met Gly Cys Lys Val Ala Gly  
 210 215 220  
 Ala Ser Arg Ile Ile Gly Val Asp Ile Asn Lys Asp Lys Phe Ala Arg  
 225 230 235 240  
 Ala Lys Glu Phe Gly Ala Thr Glu Cys Ile Asn Pro Gln Asp Phe Ser  
 245 250 255  
 Lys Pro Ile Gln Glu Val Leu Ile Glu Met Thr Asp Gly Gly Val Asp  
 260 265 270  
 Tyr Ser Phe Glu Cys Ile Gly Asn Val Lys Val Met Arg Ala Ala Leu  
 275 280 285  
 Glu Ala Cys His Lys Gly Trp Gly Val Thr Xaa Val Val Gly Val Ala  
 290 295 300

796

Ala Ser Gly Glu Glu Ile Ala Thr Arg Pro Phe Gln Leu Val Thr Gly  
305 310 315 320

Arg Thr Trp Lys Gly Thr Ala Phe Gly Gly Trp Lys Ser Val Glu Ser  
325 330 335

Val Pro Lys Leu Val Ser Glu Tyr Met Ser Lys Lys Ile Lys Val Asp  
340 345 350

Glu Phe Val Thr His Asn Leu Ser Phe Asp Glu Ile Asn Lys Ala Phe  
355 360 365

Glu Leu Met His Ser Gly Lys Ser Ile Arg Thr Val Val Lys Ile  
370 375 380

<210> 851

<211> 154

<212> PRT

<213> Homo sapiens

<400> 851

Ala Arg Ala Pro Arg Ala Thr Leu Asn Gly Pro Gly Ala Arg Gly Arg  
1 5 10 15

Val Gly Val Val Val Leu Arg Pro Arg Pro Arg Gly Leu Arg Phe Pro  
20 25 30

Trp Cys Pro Gly Arg Pro Ala Ser Gly Ala Val Ser Tyr Glu Ser Ala  
35 40 45

His Ala Ala Ser Val Arg Leu Thr Leu Arg Thr Met Glu Gly Gly Phe  
50 55 60

Gly Ser Asp Phe Gly Gly Ser Gly Ser Gly Lys Leu Asp Pro Gly Leu  
65 70 75 80

Ile Met Glu Gln Val Lys Val Gln Ile Ala Val Ala Asn Ala Gln Glu  
85 90 95

Leu Leu Gln Arg Met Thr Asp Lys Cys Phe Arg Lys Cys Ile Gly Lys  
100 105 110

Pro Gly Gly Ser Leu Asp Asn Ser Glu Gln Lys Cys Ile Ala Met Cys  
115 120 125

Met Asp Arg Tyr Met Asp Ala Trp Asn Thr Val Ser Arg Ala Tyr Asn  
130 135 140

Ser Arg Leu Gln Arg Glu Arg Ala Asn Met

797

145

150

&lt;210&gt; 852

&lt;211&gt; 396

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 852

Asp Ser Arg Val Asp Pro Arg Val Arg Ala Ile Ile Ala Lys Thr Phe  
 1 5 10 15

Lys Gly Arg Gly Ile Thr Gly Val Glu Asp Lys Glu Ser Trp His Gly  
 20 25 30

Lys Pro Leu Pro Lys Asn Met Ala Glu Gln Ile Ile Gln Glu Ile Tyr  
 35 40 45

Ser Gln Ile Gln Ser Lys Lys Lys Ile Leu Ala Thr Pro Pro Gln Glu  
 50 55 60

Asp Ala Pro Ser Val Asp Ile Ala Asn Ile Arg Met Pro Ser Leu Pro  
 65 70 75 80

Ser Tyr Lys Val Gly Asp Lys Ile Ala Thr Arg Lys Ala Tyr Gly Gln  
 85 90 95

Ala Leu Ala Lys Leu Gly His Ala Ser Asp Arg Ile Ile Ala Leu Asp  
 100 105 110

Gly Asp Thr Lys Asn Ser Thr Phe Ser Glu Ile Phe Lys Lys Glu His  
 115 120 125

Pro Asp Arg Phe Ile Glu Cys Tyr Ile Ala Glu Gln Asn Met Val Ser  
 130 135 140

Ile Ala Val Gly Cys Ala Thr Arg Asn Arg Thr Val Pro Phe Cys Ser  
 145 150 155 160

Thr Phe Ala Ala Phe Phe Thr Arg Ala Phe Asp Gln Ile Arg Met Ala  
 165 170 175

Ala Ile Ser Glu Ser Asn Ile Asn Leu Cys Gly Ser His Cys Gly Val  
 180 185 190

Ser Ile Gly Glu Asp Gly Pro Ser Gln Met Ala Leu Glu Asp Leu Ala  
 195 200 205

Met Phe Arg Ser Val Pro Thr Ser Thr Val Phe Tyr Pro Ser Asp Gly  
 210 215 220

798

Val Ala Thr Glu Lys Ala Val Glu Leu Ala Ala Asn Thr Lys Gly Ile  
 225 230 235 240  
 Cys Phe Ile Arg Thr Ser Arg Pro Glu Asn Ala Ile Ile Tyr Asn Asn  
 245 250 255  
 Asn Glu Asp Phe Gln Val Gly Gln Ala Lys Val Val Leu Lys Ser Lys  
 260 265 270  
 Asp Asp Gln Val Thr Val Ile Gly Ala Gly Val Thr Leu His Glu Ala  
 275 280 285  
 Leu Ala Ala Ala Glu Leu Leu Lys Lys Glu Lys Ile Asn Ile Arg Val  
 290 295 300  
 Leu Asp Pro Phe Thr Ile Lys Pro Leu Asp Arg Lys Leu Ile Leu Asp  
 305 310 315 320  
 Ser Ala Arg Ala Thr Lys Gly Arg Ile Leu Thr Val Glu Asp His Tyr  
 325 330 335  
 Tyr Glu Gly Gly Ile Gly Glu Ala Val Ser Ser Ala Val Val Gly Glu  
 340 345 350  
 Pro Gly Ile Thr Val Thr His Leu Ala Val Asn Arg Val Pro Arg Ser  
 355 360 365  
 Gly Lys Pro Ala Glu Leu Leu Lys Met Phe Gly Ile Asp Arg Asp Ala  
 370 375 380  
 Ile Ala Gln Ala Val Arg Gly Leu Ile Thr Lys Ala  
 385 390 395

&lt;210&gt; 853

&lt;211&gt; 302

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (228)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 853

Ser Arg Leu Gly Leu Gln Ser Cys Gly Leu Ser Thr Gln Ala Ile Thr  
 1 5 10 15

Leu Ser Glu Thr Ala Ala Ala Leu Asp Cys Ser Leu Pro Arg Leu His



799

20	25	30
Ala Arg Gln Ser Met Arg Val Thr Leu Ala Thr Ile Ala Trp Met Val		
35	40	45
Ser Phe Val Ser Asn Tyr Ser His Thr Ala Asn Ile Leu Pro Asp Ile		
50	55	60
Glu Asn Glu Asp Phe Ile Lys Asp Cys Val Arg Ile His Asn Lys Phe		
65	70	75
Arg Ser Glu Val Lys Pro Thr Ala Ser Asp Met Leu Tyr Met Thr Trp		
85	90	95
Asp Pro Ala Leu Ala Gln Ile Ala Lys Ala Trp Ala Ser Asn Cys Gln		
100	105	110
Phe Ser His Asn Thr Arg Leu Lys Pro Pro His Lys Leu His Pro Asn		
115	120	125
Phe Thr Ser Leu Gly Glu Asn Ile Trp Thr Gly Ser Val Pro Ile Phe		
130	135	140
Ser Val Ser Ser Ala Ile Thr Asn Trp Tyr Asp Glu Ile Gln Asp Tyr		
145	150	155
Asp Phe Lys Thr Arg Ile Cys Lys Lys Val Cys Gly His Tyr Thr Gln		
165	170	175
Val Val Trp Ala Asp Ser Tyr Lys Val Gly Cys Ala Val Gln Phe Cys		
180	185	190
Pro Lys Val Ser Gly Phe Asp Ala Leu Ser Asn Gly Ala His Phe Ile		
195	200	205
Cys Asn Tyr Gly Pro Gly Gly Asn Tyr Pro Thr Trp Pro Tyr Lys Arg		
210	215	220
Gly Ala Thr Xaa Ser Ala Cys Pro Asn Asn Asp Lys Cys Leu Asp Asn		
225	230	235
Leu Cys Val Asn Arg Gln Arg Asp Gln Val Lys Arg Tyr Tyr Ser Val		
245	250	255
Val Tyr Pro Gly Trp Pro Ile Tyr Pro Arg Asn Arg Tyr Thr Ser Leu		
260	265	270
Phe Leu Ile Val Asn Ser Val Ile Leu Ile Leu Ser Val Ile Ile Thr		
275	280	285
Ile Leu Val Gln His Lys Tyr Pro Asn Leu Val Leu Leu Asp		

800

290

295

300

&lt;210&gt; 854

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (235)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 854

Val Pro Ala Ser Phe Ala Ala Ala Ser Ala Val Leu Ser Ala Val Phe  
 1 5 10 15

Pro Gln Glu Pro Ala Tyr Phe Leu Asn Met Glu Ser Val Val Arg Arg  
 20 25 30

Cys Pro Phe Leu Ser Arg Val Pro Gln Ala Phe Leu Gln Lys Ala Gly  
 35 40 45

Lys Ser Leu Leu Phe Tyr Ala Gln Asn Cys Pro Lys Met Met Glu Val  
 50 55 60

Gly Ala Lys Pro Ala Pro Arg Ala Leu Ser Thr Ala Ala Val His Tyr  
 65 70 75 80

Gln Gln Ile Lys Glu Thr Pro Pro Ala Ser Glu Lys Asp Lys Thr Ala  
 85 90 95

Lys Ala Lys Val Gln Gln Thr Pro Asp Gly Ser Gln Gln Ser Pro Asp  
 100 105 110

Gly Thr Gln Leu Pro Ser Gly His Pro Leu Pro Ala Thr Ser Gln Gly  
 115 120 125

Thr Ala Ser Lys Cys Pro Phe Leu Ala Ala Gln Met Asn Gln Arg Gly  
 130 135 140

Ser Ser Val Phe Cys Lys Ala Ser Leu Glu Leu Gln Glu Asp Val Gln  
 145 150 155 160

Glu Met Asn Ala Val Arg Lys Glu Val Ala Glu Thr Ser Ala Gly Pro  
 165 170 175

Ser Val Val Ser Val Lys Thr Asp Gly Gly Asp Pro Ser Gly Leu Leu  
 180 185 190

801

Lys Asn Phe Gln Asp Ile Met Gln Lys Gln Arg Pro Glu Arg Val Ser  
195 200 205

His Leu Leu Gln Asp Asn Leu Pro Lys Ser Val Ser Thr Phe Gln Tyr  
210 215 220

Asp Arg Phe Phe Glu Lys Lys Ile Asp Glu Xaa Lys Glu  
225 230 235

<210> 855

<211> 272

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (202)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 855

Thr Pro Gly Ile Phe Thr Glu Gln Ser Met Ile Thr Phe Leu Pro Leu  
1 5 10 15

Leu Leu Gly Leu Ser Leu Gly Cys Thr Gly Ala Gly Gly Phe Val Ala  
20 25 30

His Val Glu Ser Thr Cys Leu Leu Asp Asp Ala Gly Thr Pro Lys Asp  
35 40 45

Phe Thr Tyr Cys Ile Ser Phe Asn Lys Asp Leu Leu Thr Cys Trp Asp  
50 55 60

Pro Glu Glu Asn Lys Met Ala Pro Cys Glu Phe Gly Val Leu Asn Ser  
65 70 75 80

Leu Ala Asn Val Leu Ser Gln His Leu Asn Gln Lys Asp Thr Leu Met  
85 90 95

Gln Arg Leu Arg Asn Gly Leu Gln Asn Cys Ala Thr His Thr Gln Pro  
100 105 110

Phe Trp Gly Ser Leu Thr Asn Arg Thr Arg Pro Pro Ser Val Gln Val  
115 120 125

Ala Lys Thr Thr Pro Phe Asn Thr Arg Glu Pro Val Met Leu Ala Cys  
130 135 140

Tyr Val Trp Gly Phe Tyr Pro Ala Glu Val Thr Ile Thr Trp Arg Lys  
145 150 155 160

802

Asn Gly Lys Leu Val Met Pro His Ser Ser Ala His Lys Thr Ala Gln  
 165 170 175  
 Pro Asn Gly Asp Trp Thr Tyr Gln Thr Leu Ser His Leu Ala Leu Thr  
 180 185 190  
 Pro Ser Tyr Gly Asp Thr Tyr Thr Cys Xaa Val Glu His Ile Gly Ala  
 195 200 205  
 Pro Glu Pro Ile Leu Arg Asp Trp Thr Pro Gly Leu Ser Pro Met Gln  
 210 215 220  
 Thr Leu Lys Val Ser Val Ser Ala Val Thr Leu Gly Leu Gly Leu Ile  
 225 230 235 240  
 Ile Phe Ser Leu Gly Val Ile Ser Trp Arg Arg Ala Gly His Ser Ser  
 245 250 255  
 Tyr Thr Pro Leu Pro Gly Ser Asn Tyr Ser Glu Gly Trp His Ile Ser  
 260 265 270

<210> 856  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 856  
 Val Val Ala Arg Phe Ile Arg Ile Tyr Pro Leu Thr Trp Asn Gly Ser  
 1 5 10 15  
 Leu Cys Met Arg Leu Glu Val Leu Gly Cys Ser Val Ala Pro Val Tyr  
 20 25 30  
 Ser Tyr Tyr Ala Gln Asn Glu Val Val Ala Thr Asp Asp Leu Asp Phe  
 35 40 45  
 Arg His His Ser Tyr Lys Asp Met Arg Gln Leu Met Lys Val Val Asn  
 50 55 60  
 Glu Glu Cys Pro Thr Ile Thr Arg Thr Tyr Ser Leu Gly Lys Ser Ser  
 65 70 75 80  
 Arg Gly Leu Lys Ile Tyr Ala Met Glu Ile Ser Asp Asn Pro Gly Glu  
 85 90 95

803

His Glu Leu Gly Glu Pro Glu Phe Arg Tyr Thr Ala Gly Ile His Gly  
 100 105 110  
 Asn Glu Val Leu Gly Arg Glu Leu Leu Leu Leu Met Gln Tyr Leu  
 115 120 125  
 Cys Arg Glu Tyr Arg Asp Gly Asn Pro Arg Val Arg Ser Trp Cys Arg  
 130 135 140  
 Thr His Ala Ser Thr Trp Cys Pro His  
 145 150  
 <210> 857  
 <211> 258  
 <212> PRT  
 <213> Homo sapiens  
 <400> 857  
 Cys Leu Ser Gln Lys Ala Val Arg Ala Pro Arg Phe Leu Arg Gly Leu  
 1 5 10 15  
 Pro Ser Gly Arg Val Asn Cys Phe Leu Gln Ala Gly His Gly Ala Ser  
 20 25 30  
 Arg Ser Gln Gly Ser Gly Leu Cys Gln Met Leu Lys Glu Gly Ala Lys  
 35 40 45  
 His Phe Ser Gly Leu Glu Glu Ala Val Tyr Arg Asn Ile Gln Ala Cys  
 50 55 60  
 Lys Glu Leu Ala Gln Thr Thr Arg Thr Ala Tyr Gly Pro Asn Gly Met  
 65 70 75 80  
 Asn Lys Met Val Ile Asn His Leu Glu Lys Leu Phe Val Thr Asn Asp  
 85 90 95  
 Ala Ala Thr Ile Leu Arg Glu Leu Glu Val Gln His Pro Ala Ala Lys  
 100 105 110  
 Met Ile Val Met Ala Ser His Met Gln Glu Gln Glu Val Gly Asp Gly  
 115 120 125  
 Thr Asn Phe Val Leu Val Phe Ala Gly Ala Leu Leu Glu Leu Ala Glu  
 130 135 140  
 Glu Leu Leu Arg Ile Gly Leu Ser Val Ser Glu Val Ile Glu Gly Tyr  
 145 150 155 160  
 Glu Ile Ala Cys Arg Lys Ala His Glu Ile Leu Pro Asn Leu Val Cys

Gly Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val

BNSDOCID: <WO\_\_\_0055350A1\_1\_>

806

100 105 110  
Tyr Val Ser Gly Cys Arg Gly Thr Pro Gln Ala Gly Ser Glu Gly Ser  
115 120 125

Glu Val Gly Xaa Xaa Ala Gly  
130 135

<210> 860  
<211> 52  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (2)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 860  
Ala Xaa Leu Ile Lys Thr Arg Val Leu Ile Tyr Asn Lys Ser Asn Phe  
1 5 10 15

Ser Leu Ser Leu Gly Thr Ser Asn Cys Thr Pro Gln Ile Thr Asp Thr  
20 25 30

Ser Glu Phe Phe Met Val Lys Lys Ala Pro Thr Leu Thr Tyr Lys Cys  
35 40 45

Gly Pro Arg Asn  
50

<210> 861  
<211> 321  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (18)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 861  
Ala His Gly Val Thr Ser Ala Pro Asp Asn Arg Pro Ala Leu Gly Ser  
1 5 10 15

Thr Xaa Pro Pro Val His Asn Val Thr Ser Ala Ser Gly Ser Ala Ser  
20 25 30



Gly Ser Ala Ser Thr Leu Val His Asn Gly Thr Ser Ala Arg Ala Thr  
 35 40 45  
 Thr Thr Pro Ala Ser Lys Ser Thr Pro Phe Ser Ile Pro Ser His His  
 50 55 60  
 Ser Asp Thr Pro Thr Thr Leu Ala Ser His Ser Thr Lys Thr Asp Ala  
 65 70 75 80  
 Ser Ser Thr His His Ser Thr Val Pro Pro Leu Thr Ser Ser Asn His  
 85 90 95  
 Ser Thr Ser Pro Gln Leu Ser Thr Gly Val Ser Phe Phe Phe Leu Ser  
 100 105 110  
 Phe His Ile Ser Asn Leu Gln Phe Asn Ser Ser Leu Glu Asp Pro Ser  
 115 120 125  
 Thr Asp Tyr Tyr Gln Glu Leu Gln Arg Asp Ile Ser Glu Met Phe Leu  
 130 135 140  
 Gln Ile Tyr Lys Gln Gly Gly Phe Leu Gly Leu Ser Asn Ile Lys Phe  
 145 150 155 160  
 Arg Pro Gly Ser Val Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly  
 165 170 175  
 Thr Ile Asn Val His Asp Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr  
 180 185 190  
 Glu Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp Val Ser Val Ser  
 195 200 205  
 Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala Gly Val Pro Gly  
 210 215 220  
 Trp Gly Ile Ala Leu Leu Val Leu Val Cys Val Leu Val Ala Leu Ala  
 225 230 235 240  
 Ile Val Tyr Leu Ile Ala Leu Ala Val Cys Gln Cys Arg Arg Lys Asn  
 245 250 255  
 Tyr Gly Gln Leu Asp Ile Phe Pro Ala Arg Asp Thr Tyr His Pro Met  
 260 265 270  
 Ser Glu Tyr Pro Thr Tyr His Thr His Gly Arg Tyr Val Pro Pro Ser  
 275 280 285  
 Ser Thr Asp Arg Ser Pro Tyr Glu Lys Val Ser Ala Gly Asn Gly Gly  
 290 295 300

808

Ser Ser Leu Ser Tyr Thr Asn Pro Ala Val Ala Ala Thr Ser Ala Asn  
 305 310 315 320

Leu

<210> 862

<211> 327

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (307)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 862

Phe Gly Thr Ser Leu Thr Gln Val Leu Leu Gly Ala Gly Glu Asn Thr  
 1 5 10 15

Lys Thr Asn Leu Glu Ser Ile Leu Ser Tyr Pro Lys Asp Phe Thr Cys  
 20 25 30

Val His Gln Ala Leu Lys Gly Phe Thr Thr Lys Gly Val Thr Ser Val  
 35 40 45

Ser Gln Ile Phe His Ser Pro Asp Leu Ala Ile Arg Asp Thr Phe Val  
 50 55 60

Asn Ala Ser Arg Thr Leu Tyr Ser Ser Ser Pro Arg Val Leu Ser Asn  
 65 70 75 80

Asn Ser Asp Ala Asn Leu Glu Leu Ile Asn Thr Trp Val Ala Lys Asn  
 85 90 95

Thr Asn Asn Lys Ile Ser Arg Leu Leu Asp Ser Leu Pro Ser Asp Thr  
 100 105 110

Arg Leu Val Leu Leu Asn Ala Ile Tyr Leu Ser Ala Lys Trp Lys Thr  
 115 120 125

Thr Phe Asp Pro Lys Lys Thr Arg Met Glu Pro Phe His Phe Lys Asn  
 130 135 140

Ser Val Ile Lys Val Pro Met Met Asn Ser Lys Lys Tyr Pro Val Ala  
 145 150 155 160

His Phe Ile Asp Gln Thr Leu Lys Ala Lys Val Gly Gln Leu Gln Leu

809

165 170 175  
 Ser His Asn Leu Ser Leu Val Ile Leu Val Pro Gln Asn Leu Lys His  
 180 185 190  
 Arg Leu Glu Asp Met Glu Gln Ala Leu Ser Pro Ser Val Phe Lys Ala  
 195 200 205  
 Ile Met Glu Lys Leu Glu Met Ser Lys Phe Gln Pro Thr Leu Leu Thr  
 210 215 220  
 Leu Pro Arg Ile Lys Val Thr Thr Ser Gln Asp Met Leu Ser Ile Met  
 225 230 235 240  
 Glu Lys Leu Glu Phe Phe Asp Phe Ser Tyr Asp Leu Asn Leu Cys Gly  
 245 250 255  
 Leu Thr Glu Asp Pro Asp Leu Gln Val Ser Ala Met Gln His Gln Thr  
 260 265 270  
 Val Leu Glu Leu Thr Glu Thr Gly Val Glu Ala Ala Ala Ala Ser Ala  
 275 280 285  
 Ile Ser Val Ala Arg Thr Leu Leu Val Phe Glu Val Gln Gln Pro Phe  
 290 295 300  
 Leu Phe Xaa Leu Trp Asp Gln Gln His Lys Phe Pro Val Phe Met Gly  
 305 310 315 320  
 Arg Val Tyr Asp Pro Arg Ala  
 325

&lt;210&gt; 863

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 863

Tyr Tyr Ile Val His Leu Lys Leu Thr Glu Arg Val Asn Leu Lys Cys  
 1 5 10 15  
 Ser His His Thr Asn Pro Lys Val Thr Met Phe Ser Pro His Lys Pro  
 20 25 30  
 Lys Gly Asn Tyr Val Leu Ile Ser Leu Ile Val Val Thr Ile Ser Gln  
 35 40 45  
 Cys Ile His Leu Pro Lys His Tyr Val Val Tyr Leu Glu Tyr Ile Ile  
 50 55 60

810

Leu Phe Ile Asn Tyr Thr Ser Ile Lys Leu Lys Glu Gly Ile Thr Asn  
 65 70 75 80

Ser His Lys Ile Gln Ile  
 85

&lt;210&gt; 864

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 864

Leu Thr Gln Gln Gln Gln Pro Ala Thr Gly Pro Gln Pro Ser Leu Gly  
 1 5 10 15

Val Ser Phe Gly Thr Pro Phe Gly Ser Gly Ile Gly Thr Gly Leu Gln  
 20 25 30

Ser Ser Gly Leu Gly Ser Ser Asn Leu Gly Gly Phe Gly Thr Ser Ser  
 35 40 45

Gly Phe Gly Cys Ser Thr Thr Gly Ala Ser Thr Phe Gly Phe Gly Thr  
 50 55 60

Thr Asn Lys Pro Ser Gly Ser Leu Ser Ala Gly Phe Gly Ser Ser Ser  
 65 70 75 80

Thr Ser Gly Phe Asn Phe Ser Asn Pro Gly Ile Thr Ala Ser Ala Gly  
 85 90 95

Leu Thr Phe Gly Val Ser Asn Pro Ala Ser Ala Gly Phe Gly Thr Gly  
 100 105 110

Gly Gln Leu Leu Gln Leu Lys Lys Pro Pro Ala Gly Asn Lys Arg Gly  
 115 120 125

Lys Arg  
 130

&lt;210&gt; 865

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 865

Ser Glu Trp Lys Ile Lys Gly Pro Ser Ser Pro Leu Ala Ser Leu Pro

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<210> 866
<211> 529
<212> PRT
<213> Homo sapiens
```

<400> 866  
Pro Pro Pro Glu Pro Arg Ala Xaa Met Ala Glu Asn Pro Ser Leu Glu  
1 5 10 15

Met Arg Arg His Arg Asn Glu Val Thr Val Glu Leu Arg Lys Asn Lys  
35 40 45

Leu Glu Asp Ser Asp Val Asp Ala Asp Phe Lys Ala Gln Asn Val Thr  
65 70 75 80

Leu Glu Ala Ile Leu Gln Asn Ala Thr Ser Asp Asn Pro Val Val Gln  
85 90 95

Leu Ser Ala Val Gln Ala Ala Arg Lys Leu Leu Ser Ser Asp Arg Asn

100	105	110
Pro Pro Ile Asp Asp Leu Ile Lys Ser Gly Ile Leu Pro Ile Leu Val		
115	120	125
Lys Cys Leu Glu Arg Asp Asp Asn Pro Ser Leu Gln Phe Glu Ala Ala		
130	135	140
Trp Ala Leu Thr Asn Ile Ala Ser Gly Thr Ser Ala Gln Thr Gln Ala		
145	150	155 160
Val Val Gln Ser Asn Ala Val Pro Leu Phe Leu Arg Leu Leu Arg Ser		
	165	170 175
Pro His Gln Asn Val Cys Glu Gln Ala Val Trp Ala Leu Gly Asn Ile		
	180	185 190
Ile Gly Asp Gly Pro Gln Cys Arg Asp Tyr Val Ile Ser Leu Gly Val		
	195	200 205
Val Lys Pro Leu Leu Ser Phe Ile Ser Pro Ser Ile Pro Ile Thr Phe		
	210	215 220
Leu Arg Asn Val Thr Trp Val Ile Val Asn Leu Cys Arg Asn Lys Asp		
	225	230 235 240
Pro Pro Pro Pro Met Glu Thr Val Gln Glu Ile Leu Pro Ala Leu Cys		
	245	250 255
Val Leu Ile Tyr His Thr Asp Ile Asn Ile Leu Val Asp Thr Val Trp		
	260	265 270
Ala Leu Ser Tyr Leu Thr Asp Gly Gly Asn Glu Gln Ile Gln Met Val		
	275	280 285
Ile Asp Ser Gly Val Val Pro Phe Leu Val Pro Leu Leu Ser His Gln		
	290	295 300
Glu Val Lys Val Gln Thr Ala Ala Leu Arg Ala Val Gly Asn Ile Val		
	305	310 315 320
Thr Gly Thr Asp Glu Gln Thr Gln Val Val Leu Asn Cys Asp Val Leu		
	325	330 335
Ser His Phe Pro Asn Leu Leu Ser His Pro Lys Glu Lys Ile Asn Lys		
	340	345 350
Glu Ala Val Trp Phe Leu Ser Asn Ile Thr Ala Gly Asn Gln Gln Gln		
	355	360 365
Val Gln Ala Val Ile Asp Ala Gly Leu Ile Pro Met Ile Ile His Gln		

370                      375                      380  
 Leu Ala Lys Gly Asp Phe Gly Thr Gln Lys Glu Ala Ala Trp Ala Ile  
 385                      390                      395                      400  
 Ser Asn Leu Thr Ile Ser Gly Arg Lys Asp Gln Val Glu Tyr Leu Val  
                     405                      410                      415  
 Gln Gln Asn Val Ile Pro Pro Phe Cys Asn Leu Leu Ser Val Lys Asp  
                     420                      425                      430  
 Ser Gln Val Val Gln Val Val Leu Asp Gly Leu Lys Asn Ile Leu Ile  
                     435                      440                      445  
 Met Ala Gly Asp Glu Ala Ser Thr Ile Ala Glu Ile Ile Glu Glu Cys  
                     450                      455                      460  
 Gly Gly Leu Glu Lys Ile Glu Val Leu Gln Gln His Glu Asn Glu Asp  
 465                      470                      475                      480  
 Ile Tyr Lys Leu Ala Phe Glu Ile Ile Asp Gln Tyr Phe Ser Gly Asp  
                     485                      490                      495  
 Asp Ile Asp Glu Asp Pro Cys Leu Ile Pro Glu Ala Thr Gln Gly Gly  
                     500                      505                      510  
 Thr Tyr Asn Phe Xaa Pro Thr Ala Asn Leu Gln Thr Lys Glu Phe Asn  
                     515                      520                      525

Phe

<210> 867  
 <211> 237  
 <212> PRT  
 <213> Homo sapiens

<400> 867  
 Arg Pro Gly Pro Val Arg Arg Arg Gly Lys Val Glu Leu Ile Lys Phe  
     1                      5                      10                      15  
 Val Arg Val Gln Trp Arg Arg Pro Gln Val Glu Trp Arg Arg Arg Arg  
                     20                      25                      30  
 Trp Gly Pro Gly Pro Gly Ala Ser Met Ala Gly Ser Glu Glu Leu Gly  
                     35                      40                      45  
 Leu Arg Glu Asp Thr Leu Arg Val Leu Ala Ala Phe Leu Arg Arg Gly  
                     50                      55                      60

814

Glu Ala Ala Gly Ser Pro Val Pro Thr Pro Pro Arg Ser Pro Ala Gln  
65 70 75 80

Glu Glu Pro Thr Asp Phe Leu Ser Arg Leu Arg Arg Cys Leu Pro Cys  
85 90 95

Ser Leu Gly Arg Gly Ala Ala Pro Ser Glu Ser Pro Arg Pro Cys Ser  
100 105 110

Leu Pro Ile Arg Pro Cys Tyr Gly Leu Glu Pro Gly Pro Ala Thr Pro  
115 120 125

Asp Phe Tyr Ala Leu Val Ala Gln Arg Leu Glu Gln Leu Val Gln Glu  
130 135 140

Gln Leu Lys Ser Pro Pro Ser Pro Glu Leu Gln Gly Pro Pro Ser Thr  
145 150 155 160

Glu Lys Glu Ala Ile Leu Arg Arg Leu Val Ala Leu Leu Glu Glu Glu  
165 170 175

Ala Glu Val Ile Asn Gln Lys Leu Ala Ser Asp Pro Ala Leu Arg Thr  
180 185 190

Ser Trp Ser Ala Cys Pro Pro Thr Leu Ser Pro Ala Trp Trp Ser Cys  
195 200 205

Ser Val Ala Gly Met Thr Ala Leu Ala Gln Ala Glu His Ala Pro Gly  
210 215 220

Pro Arg Leu Leu Pro Arg Ser Pro Trp Pro Ala Trp Pro  
225 230 235

&lt;210&gt; 868

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids



815

&lt;400&gt; 868

Leu Ser Val Ser Ala Xaa Ala Ala Xaa Val Ala Ala Ala Ala Ile His  
 1 5 10 15  
 Ser Asp Ser Ala Ala Ala Pro Gly Gly Gly Gly Ala Ala Arg Asp Phe  
 20 25 30  
 Phe Phe Phe Gln Thr Asp Arg Gly Ala Ala Ala Asp Met Ser Thr Pro  
 35 40 45  
 Ala Arg Arg Arg Leu Met Arg Asp Phe Lys Arg Leu Gln Glu Asp Pro  
 50 55 60  
 Pro Val Gly Val Ser Gly Ala Pro Ser Glu Asn Asn Ile Met Gln Trp  
 65 70 75 80  
 Asn Ala Val Ile Phe Gly Pro Glu Gly Thr Pro Phe Glu Asp Gly Thr  
 85 90 95  
 Phe Lys Leu Val Ile Glu Phe Ser Glu Glu Tyr Pro Asn Lys Pro Pro  
 100 105 110  
 Thr Val Arg Phe Leu Ser Lys Met Phe His Pro Asn Val Tyr Ala Asp  
 115 120 125  
 Gly Ser Ile Cys Leu Asp Ile Leu Gln Asn Arg Trp Ser Pro Thr Tyr  
 130 135 140  
 Asp Val Ser Ser Ile Leu Thr Ser Ile Gln Ser Leu Leu Asp Glu Pro  
 145 150 155 160  
 Asn Pro Asn Ser Pro Ala Asn Ser Gln Ala Ala Gln Leu Tyr Gln Glu  
 165 170 175  
 Asn Lys Arg Glu Tyr Glu Lys Arg Val Ser Ala Ile Val Glu Gln Ser  
 180 185 190  
 Trp Asn Asp Ser  
 195

&lt;210&gt; 869

&lt;211&gt; 544

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 869

Ala Asp Ala Trp Val Ala Xaa Ala Xaa Ala Ser Ser Gly Leu Val Val  
 1 5 10 15  
 Ala Arg Pro Thr Ser Ala Val Pro Ala Glu Pro Arg Pro Phe Arg Pro  
 20 25 30  
 Ser Pro Pro His Leu Ala Ala Met Arg Leu Arg Arg Leu Ala Leu Phe  
 35 40 45  
 Pro Gly Val Ala Leu Leu Leu Ala Ala Ala Arg Leu Ala Ala Ala Ser  
 50 55 60  
 Asp Val Leu Glu Leu Thr Asp Asp Asn Phe Glu Ser Arg Ile Ser Asp  
 65 70 75 80  
 Thr Gly Ser Ala Gly Leu Met Leu Val Glu Phe Phe Ala Pro Trp Cys  
 85 90 95  
 Gly His Cys Lys Arg Leu Ala Pro Glu Tyr Glu Ala Ala Ala Thr Arg  
 100 105 110  
 Leu Lys Gly Ile Val Pro Leu Ala Lys Val Asp Cys Thr Ala Asn Thr  
 115 120 125  
 Asn Thr Cys Asn Lys Tyr Gly Val Ser Gly Tyr Pro Thr Leu Lys Ile  
 130 135 140  
 Phe Arg Asp Gly Glu Glu Ala Gly Ala Tyr Asp Gly Pro Arg Thr Ala  
 145 150 155 160  
 Asp Gly Ile Val Ser His Leu Lys Lys Gln Ala Gly Pro Ala Ser Val  
 165 170 175  
 Pro Leu Arg Thr Glu Glu Glu Phe Lys Lys Phe Ile Ser Asp Lys Asp  
 180 185 190  
 Ala Ser Ile Val Gly Phe Phe Asp Asp Ser Phe Ser Glu Ala His Ser  
 195 200 205  
 Glu Phe Leu Lys Ala Ala Ser Asn Leu Arg Asp Asn Tyr Arg Phe Ala  
 210 215 220  
 His Thr Asn Val Glu Ser Leu Val Asn Glu Tyr Asp Asp Asn Gly Glu  
 225 230 235 240

Gly Ile Ile Leu Phe Arg Pro Ser His Leu Thr Asn Lys Phe Glu Asp  
245 250 255

Lys Thr Val Ala Tyr Thr Glu Gln Lys Met Thr Ser Gly Lys Ile Lys  
260 265 270

Lys Phe Ile Gln Glu Asn Ile Phe Gly Ile Cys Pro His Met Thr Glu  
275 280 285

Asp Asn Lys Asp Leu Ile Gln Gly Lys Asp Leu Leu Ile Ala Tyr Tyr  
290 295 300

Asp Val Asp Tyr Glu Lys Asn Ala Lys Gly Ser Asn Tyr Trp Arg Asn  
305 310 315 320

Arg Val Met Met Val Ala Lys Lys Phe Leu Asp Ala Gly His Lys Leu  
325 330 335

Asn Phe Ala Val Ala Ser Arg Lys Thr Phe Ser His Glu Leu Ser Asp  
340 345 350

Phe Gly Leu Glu Ser Thr Ala Gly Glu Ile Pro Val Val Ala Ile Arg  
355 360 365

Thr Ala Lys Gly Glu Lys Phe Val Met Gln Glu Glu Phe Ser Arg Asp  
370 375 380

Gly Lys Ala Leu Glu Arg Phe Leu Gln Asp Tyr Phe Asp Gly Asn Leu  
385 390 395 400

Lys Arg Tyr Leu Lys Ser Glu Pro Ile Pro Glu Ser Asn Asp Gly Pro  
405 410 415

Val Lys Val Val Val Ala Glu Asn Phe Asp Glu Ile Val Asn Asn Glu  
420 425 430

Asn Lys Asp Val Leu Ile Glu Phe Tyr Ala Pro Trp Cys Gly His Cys  
435 440 445

Lys Asn Leu Glu Pro Lys Tyr Lys Glu Leu Gly Glu Lys Leu Ser Lys  
450 455 460

Asp Pro Asn Ile Val Ile Ala Lys Met Asp Ala Thr Ala Asn Asp Val  
465 470 475 480

Pro Ser Pro Tyr Glu Val Arg Gly Phe Pro Thr Ile Tyr Phe Ser Pro  
485 490 495

Ala Asn Lys Lys Leu Asn Pro Lys Lys Tyr Glu Gly Gly Arg Glu Leu  
500 505 510

818

Ser Asp Phe Ile Ser Tyr Leu Gln Arg Glu Ala Thr Asn Pro Pro Val  
 515 520 525

Ile Gln Glu Glu Lys Pro Lys Lys Lys Lys Lys Ala Gln Glu Asp Leu  
 530 535 540

<210> 870

<211> 111

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 870

Arg Arg Xaa Ala Ile Phe Thr Cys Glu Val Pro Gly Val Tyr Tyr Phe  
 1 5 10 15

Xaa Tyr His Val His Cys Lys Gly Gly Asn Val Trp Val Ala Leu Phe  
 20 25 30

Lys Asn Asn Glu Pro Val Met Tyr Thr Tyr Asp Glu Tyr Lys Lys Gly  
 35 40 45

Phe Leu Asp Gln Ala Ser Gly Ser Ala Val Leu Leu Leu Arg Pro Gly  
 50 55 60

Asp Arg Cys Ser Ser Arg Cys Pro Gln Asn Arg Leu Gln Asp Cys Met  
 65 70 75 80

Pro Gly Ser Met Ser Thr Pro Pro Phe Gln Asp Ile Tyr Cys Ile Pro  
 85 90 95

Cys Lys Asn Lys Lys Thr Lys Asn Lys Glu Lys Lys Glu Ile Leu  
 100 105 110

819

&lt;210&gt; 871

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 871

Gly Lys Thr Glu Val Asn Tyr Thr Gln Leu Val Asp Leu His Ala Arg  
1 5 10 15

Tyr Ala Glu Cys Gly Leu Arg Ile Leu Ala Phe Pro Cys Asn Gln Phe  
20 25 30

Gly Lys Gln Glu Pro Gly Ser Asn Glu Glu Ile Lys Glu Phe Ala Ala  
35 40 45

Gly Tyr Asn Val Lys Phe Asp Met Phe Ser Lys Ile Cys Val Asn Gly  
50 55 60

Asp Asp Ala His Pro Leu Trp Lys Trp Met Lys Ile Gln Pro Lys Gly  
65 70 75 80

Lys Gly Ile Leu Gly Asn Ala Ile Lys Trp Asn Phe Thr Lys Phe Leu  
85 90 95

Ile Asp Lys Asn Gly Cys Val Val Lys Arg Tyr Gly Pro Met Glu Glu  
100 105 110

Pro Leu Val Ile Glu Lys Asp Leu Pro His Tyr Phe  
115 120

&lt;210&gt; 872

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 872

Ser Gln His Phe Gly Arg Pro Arg Gln Ala Glu His Leu Lys Glu Phe  
1 5 10 15

Lys Thr Ser Val Ala Asn Val Val Asn Pro Val Ser Thr Lys Asn Thr  
20 25 30

Lys Ile Val  
35

&lt;210&gt; 873

&lt;211&gt; 420

820

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 873

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Val Cys Leu Gln Leu Cys Gln Ser Thr Val Ser Cys Pro Leu Gly Tyr
  1              5              10              15

Leu Ala Ser Thr Ala Thr Asn Asp Cys Gly Cys Thr Thr Thr Thr Cys
      20              25              30

Leu Pro Asp Lys Val Cys Val His Arg Ser Thr Ile Tyr Pro Val Gly
      35              40              45

Gln Phe Trp Glu Glu Gly Cys Asp Val Cys Thr Cys Thr Asp Met Glu
      50              55              60

Asp Ala Val Met Gly Leu Arg Val Ala Gln Cys Ser Gln Lys Pro Cys
      65              70              75              80

Glu Asp Ser Cys Arg Ser Gly Phe Thr Tyr Val Leu His Glu Gly Glu
      85              90              95

Cys Cys Gly Arg Cys Leu Pro Ser Ala Cys Glu Val Val Thr Gly Ser
      100              105              110

Pro Arg Gly Asp Ser Gln Ser Ser Trp Lys Ser Val Gly Ser Gln Trp
      115              120              125

Ala Ser Pro Glu Asn Pro Cys Leu Ile Asn Glu Cys Val Arg Val Lys
      130              135              140

Glu Glu Val Phe Ile Gln Gln Arg Asn Val Ser Cys Pro Gln Leu Glu
      145              150              155              160

Val Pro Val Cys Pro Ser Gly Phe Gln Leu Ser Cys Lys Thr Ser Ala
      165              170              175

Cys Cys Pro Ser Cys Arg Cys Glu Arg Met Glu Ala Cys Met Leu Asn
      180              185              190

Gly Thr Val Ile Gly Pro Gly Lys Thr Val Met Ile Asp Val Cys Thr
      195              200              205

Thr Cys Arg Cys Met Val Gln Val Gly Val Ile Ser Gly Phe Lys Leu
      210              215              220

Glu Cys Arg Lys Thr Thr Cys Asn Pro Cys Pro Leu Gly Tyr Lys Glu
      225              230              235              240

Glu Asn Asn Thr Gly Glu Cys Cys Gly Arg Cys Leu Pro Thr Ala Cys
      245              250              255

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821

Thr Ile Gln Leu Arg Gly Gly Gln Ile Met Thr Leu Lys Arg Asp Glu  
260 265 270

Thr Leu Gln Asp Gly Cys Asp Thr His Phe Cys Lys Val Asn Glu Arg  
275 280 285

Gly Glu Tyr Phe Trp Glu Lys Arg Val Thr Gly Cys Pro Pro Phe Asp  
290 295 300

Glu His Lys Cys Leu Ala Glu Gly Gly Lys Ile Met Lys Ile Pro Gly  
305 310 315 320

Thr Cys Cys Asp Thr Cys Glu Glu Pro Glu Cys Asn Asp Ile Thr Ala  
325 330 335

Arg Leu Gln Tyr Val Lys Val Gly Ser Cys Lys Ser Glu Val Glu Val  
340 345 350

Asp Ile His Tyr Cys Gln Gly Lys Cys Ala Ser Lys Ala Met Tyr Ser  
355 360 365

Ile Asp Ile Asn Asp Val Gln Asp Gln Cys Ser Cys Cys Ser Pro Thr  
370 375 380

Arg Thr Glu Pro Met Gln Val Ala Leu His Cys Thr Asn Gly Ser Val  
385 390 395 400

Val Tyr His Glu Val Leu Asn Ala Met Glu Cys Lys Cys Ser Pro Arg  
405 410 415

Lys Cys Ser Lys  
420

&lt;210&gt; 874

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (90)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (103)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

822

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (143)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 874

Arg Gln Val Pro His Glu Arg Ala Val Arg Asp Gly Arg Gly Gly Gly  
 1 5 10 15

Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met Arg Arg His Ser  
 20 25 30

Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala Val Val Leu Gln  
 35 40 45

Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala  
 50 55 60

Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu Glu Ala Arg Thr  
 65 70 75 80

Asp Ser Pro Phe Pro Asn Ser Cys Ala Xaa Gly Met Ala Asn Gly Asp  
 85 90 95

Ala Pro Cys Met Gly Ala Xaa Lys Arg Gly Gly Cys Gly Gly Tyr Ala  
 100 105 110

Gln Trp Thr Arg Tyr Thr Cys Gln Arg Pro Ser Ala Arg Ser Phe Arg  
 115 120 125

Phe Leu Pro Phe Leu Ser Arg His Val Arg Arg Leu Ser Pro Xaa Ser  
 130 135 140

Ser Lys Ser Val Gly Ser Leu  
 145 150

&lt;210&gt; 875

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 875

Ala Leu Asn Leu Asn Ser Gln Leu Asn Ile Pro Lys Asp Thr Ser Gln  
 1 5 10 15

Leu Lys Lys His Ile Thr Leu Leu Cys Asp Arg Leu Ser Lys Gly Gly  
 20 25 30

Arg Leu Cys Leu Ser Thr Asp Ala Ala Ala Pro Gln Thr Met Val Met



823

35                      40                      45  
 Pro Gly Gly Cys Thr Thr Ile Pro Glu Ser Asp Leu Glu Glu Arg Ser  
     50                      55                      60  
 Val Glu Gln Asp Ser Thr Glu Leu Phe Thr Asn His Arg His Leu Thr  
     65                      70                      75                      80  
 Ala Glu Thr Pro Arg Pro Val Ser Pro Leu Gln Gly Val Ser Glu  
                             85                      90                      95

<210> 876  
 <211> 238  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (10)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (15)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (20)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 876  
 Thr Lys Lys Ala Leu Glu Xaa Ser Asn Xaa Arg Phe Ala Ala Xaa Phe  
     1                      5                      10                      15

Phe Arg Thr Xaa Trp Asn Pro Pro Gly Ala Phe Lys Glu Phe Gly Thr  
                     20                      25                      30

Ser Leu Leu Arg Arg Arg Arg Gly Ser Gly Ala Asn Met Pro Val Ala  
     35                      40                      45

Arg Ser Trp Val Cys Arg Lys Thr Tyr Val Thr Pro Arg Arg Pro Phe  
     50                      55                      60

824

Glu Lys Ser Arg Leu Asp Gln Glu Leu Lys Leu Ile Gly Glu Tyr Gly  
 65 70 75 80  
 Leu Arg Asn Lys Arg Glu Val Trp Arg Val Lys Phe Thr Leu Ala Lys  
 85 90 95  
 Ile Arg Lys Ala Ala Arg Glu Leu Leu Thr Leu Asp Glu Lys Asp Pro  
 100 105 110  
 Arg Arg Leu Phe Glu Gly Asn Ala Leu Leu Arg Arg Leu Val Arg Ile  
 115 120 125  
 Gly Val Leu Asp Glu Gly Lys Met Lys Leu Asp Tyr Ile Leu Gly Leu  
 130 135 140  
 Lys Ile Glu Asp Phe Leu Glu Arg Arg Leu Gln Thr Gln Val Phe Lys  
 145 150 155 160  
 Leu Gly Leu Ala Lys Ser Ile His His Ala Arg Val Leu Ile Arg Gln  
 165 170 175  
 Arg His Ile Arg Val Arg Lys Gln Val Val Asn Ile Pro Ser Phe Ile  
 180 185 190  
 Val Arg Leu Asp Ser Gln Lys His Ile Asp Phe Ser Leu Arg Ser Pro  
 195 200 205  
 Tyr Gly Gly Gly Arg Pro Gly Arg Val Lys Arg Lys Asn Ala Lys Lys  
 210 215 220  
 Gly Gln Gly Gly Ala Gly Ala Gly Asp Asp Glu Glu Glu Asp  
 225 230 235

&lt;210&gt; 877

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 877

Ala Gly Ile Arg His Glu Pro Ser Ala Ala Ala Met Ser Ser Gly Ala  
 1 5 10 15  
 Ser Ala Ser Ala Leu Gln Arg Leu Val Glu Gln Leu Lys Leu Glu Ala  
 20 25 30  
 Gly Val Glu Arg Ile Lys Val Ser Gln Ala Ala Ala Glu Leu Gln Gln  
 35 40 45  
 Tyr Cys Met Gln Asn Ala Cys Lys Asp Ala Leu Leu Val Gly Val Pro

825

50

55

60

Ala Gly Ser Asn Pro Phe Arg Glu Pro Arg Ser Cys Ala Leu Leu  
65 70 75

&lt;210&gt; 878

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 878

Ile Ala Ile Met Asn Asp Thr Val Thr Ile Arg Thr Arg Lys Phe Met  
1 5 10 15

Thr Asn Arg Leu Leu Gln Arg Lys Gln Met Val Ile Asp Val Leu His  
20 25 30

Pro Gly Lys Ala Thr Val Pro Lys Thr Glu Ile Arg Glu Lys Leu Ala  
35 40 45

Lys Met Tyr Lys Thr Thr Pro Asp Val Ile Phe Val Phe Gly Phe Arg  
50 55 60

Thr His Phe Gly Gly Gly Lys Thr Thr Gly Phe Gly Met Ile Tyr Asp  
65 70 75 80

Ser Leu Asp Tyr Ala Lys Lys Asn Glu Pro Lys His Arg Leu Ala Arg  
85 90 95

His Gly Leu Tyr Glu Lys Lys Lys Thr Ser Arg Lys Gln Arg Lys Glu  
100 105 110

Arg Lys Asn Arg Met Lys Lys Val Arg Gly Thr Ala Lys Ala Asn Val  
115 120 125

Gly Ala Gly Lys Lys Pro Lys Glu  
130 135

&lt;210&gt; 879

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 879

Gly Cys Val Gly Val Arg Pro Ser Leu His Pro Ala Thr Ser Thr Ala  
1 5 10 15

826

Ser Gly Ser Ala Ser Pro Thr Leu Ala Arg Ala Met Ala Ser Val Ser  
20 25 30  
Glu Leu Ala Cys Ile Tyr Ser Ala Leu Ile Leu His Asp Asp Glu Val  
35 40 45  
Thr Val Thr Glu Asp Lys Ile Asn Ala Leu Ile Lys Ala Ala Gly Val  
50 55 60  
Asn Val Glu Pro Phe Trp Pro Gly Leu Phe Ala Lys Ala Leu Ala Asn  
65 70 75 80  
Val Asn Ile Gly Ser Leu Ile Cys Asn Val Gly Ala Gly Gly Pro Ala  
85 90 95  
Pro Ala Ala Gly Ala Ala Pro Ala Gly Gly Pro Ala Pro Ser Thr Ala  
100 105 110  
Ala Ala Pro Ala Glu Glu Lys Lys Val Glu Ala Lys Lys Glu Glu Ser  
115 120 125  
Glu Glu Ser Asp Asp Asp Met Gly Phe Gly Leu Phe Asp  
130 135 140

&lt;210&gt; 880

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (14)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (128)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (130)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

827

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (131)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 880

Ser Ala Gly Ala His Ala His Gly Ala Arg Glu Leu Ala Xaa Phe Leu  
 1 5 10 15

Thr Pro Xaa Pro Gly Ala Glu Ala Lys Glu Val Glu Glu Thr Ile Glu  
 20 25 30

Gly Met Leu Leu Arg Leu Glu Glu Phe Cys Ser Leu Ala Asp Leu Ile  
 35 40 45

Arg Ser Asp Thr Ser Gln Ile Leu Glu Glu Asn Ile Pro Val Leu Lys  
 50 55 60

Ala Lys Leu Thr Glu Met Arg Gly Ile Tyr Ala Lys Val Asp Arg Leu  
 65 70 75 80

Glu Ala Phe Val Lys Met Val Gly His His Val Ala Phe Leu Glu Ala  
 85 90 95

Asp Val Leu Gln Ala Glu Arg Asp His Gly Ala Phe Pro Gln Ala Leu  
 100 105 110

Arg Arg Trp Leu Gly Ser Ala Gly Ser Pro Pro Ser Gly Thr Ser Xaa  
 115 120 125

Leu Xaa Xaa Cys Pro  
 130

&lt;210&gt; 881

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (14)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (124)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (136)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (171)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 881

Ile Glu Glu Pro Arg Asp Thr Arg Leu Gln Val Cys Ser Xaa Val His  
 1 5 10 15

Ile Trp Cys Leu Asp Lys Phe Lys Met Arg Lys His Arg His Leu Pro  
 20 25 30

Leu Val Ala Val Phe Cys Leu Phe Leu Ser Gly Phe Pro Thr Thr His  
 35 40 45

Ala Gln Gln Gln Gln Ala Val Ile Glu Val Asn Lys Arg Asp Ile Val  
 50 55 60

Phe Leu Val Asp Gly Ser Ser Ala Leu Gly Leu Ala Asn Phe Asn Ala  
 65 70 75 80

Ile Arg Asp Phe Ile Ala Lys Val Ile Gln Arg Leu Glu Ile Gly Gln  
 85 90 95

Asp Leu Ile Gln Val Ala Val Ala Gln Tyr Ala Asp Thr Val Arg Pro  
 100 105 110

Glu Phe Tyr Phe Asn Thr His Pro Thr Lys Arg Xaa Val Ile Thr Ala  
 115 120 125

Val Arg Lys Met Lys Pro Leu Xaa Gly Ser Ala Leu Tyr Thr Gly Ser  
 130 135 140

Ala Leu Asp Phe Val Arg Asn Asn Leu Phe Thr Ser Ser Ala Gly Tyr  
 145 150 155 160

Arg Ala Ala Glu Gly Ile Pro Lys Leu Leu Xaa Leu Ile Thr Gly Gly  
 165 170 175

Lys Ser Leu Asp Glu Ile Ser Gln Pro Ala Gln Glu Leu Lys Arg Ser  
 180 185 190

Ser Ile Met Ala Phe Ala Ile Gly Asn Lys Gly Ala Asp Gln Ala Glu  
 195 200 205

Leu Glu Glu Ile Ala Phe Asp Ser Ser Leu Val Phe Ile Pro Ala Glu  
 210 215 220

829

Phe Arg Ala Ala Pro Leu Gln Gly Met Leu Pro Gly Leu Leu Ala Pro  
225 230 235 240

Leu Arg Thr Leu Ser Gly Thr Pro Glu Val His Ser Asn Lys Arg Asp  
245 250 255

Ile Ile Phe Leu  
260

<210> 882  
<211> 149  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (1)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (2)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (6)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (9)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (13)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (16)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (19)  
<223> Xaa equals any of the naturally occurring L-amino acids

830

&lt;400&gt; 882

Xaa Xaa Glu Ser Glu Xaa Ser Phe Xaa Cys Arg Lys Xaa Ile Ile Xaa  
 1 5 10 15

Phe Leu Xaa Tyr Lys Arg Val Val Phe Leu Lys Gln Leu Ala Ser Gly  
 20 25 30

Leu Leu Leu Val Thr Gly Pro Leu Val Leu Asn Arg Val Pro Leu Arg  
 35 40 45

Arg Thr His Gln Lys Phe Val Ile Ala Thr Ser Thr Lys Ile Asp Ile  
 50 55 60

Ser Asn Val Lys Ile Pro Lys His Leu Thr Asp Ala Tyr Phe Lys Lys  
 65 70 75 80

Lys Lys Leu Arg Lys Pro Arg His Gln Glu Gly Glu Ile Phe Asp Thr  
 85 90 95

Glu Lys Glu Lys Tyr Glu Ile Thr Glu Gln Arg Lys Ile Asp Gln Lys  
 100 105 110

Ala Val Asp Ser Gln Ile Leu Pro Lys Ile Lys Ala Ile Pro Gln Leu  
 115 120 125

Gln Gly Tyr Leu Arg Ser Val Phe Ala Leu Thr Asn Gly Ile Tyr Pro  
 130 135 140

His Lys Leu Val Phe  
 145

&lt;210&gt; 883

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 883

Trp Lys Ser Val Val Val Leu Ala Val Ser Ala Gly Ala Gly Ser Ala  
 1 5 10 15

His Pro Arg Gln Asn Lys Tyr Ser Val Leu Leu Pro Thr Tyr Asn Glu  
 20 25 30

Arg Glu Asn Leu Pro Leu Ile Val Trp Leu Leu Val Lys Ser Phe Ser  
 35 40 45

Glu Ser Gly Ile Asn Tyr Glu Ile Ile Ile Ile Asp Asp Gly Ser Pro  
 50 55 60



831

Asp Gly Thr Arg Asp Val Ala Glu Gln Leu Glu Lys Ile Tyr Gly Ser  
 65 70 75 80  
 Asp Arg Ile Leu Leu Arg Pro Arg Glu Lys Lys Leu Gly Leu Gly Thr  
 85 90 95  
 Ala Tyr Ile His Gly Met Lys His Ala Thr Gly Asn Tyr Ile Ile Ile  
 100 105 110  
 Met Asp Ala Asp Leu Ser His His Pro Lys Phe Ile Pro Glu Phe Ile  
 115 120 125  
 Arg Lys Gln Lys Glu Gly Asn Phe Asp Ile Val Ser Gly Thr Arg Tyr  
 130 135 140  
 Lys Gly Asn Gly Gly Val Tyr Gly Trp Asp Leu Lys Arg Lys Ile Ile  
 145 150 155 160  
 Ser Arg Gly Ala Asn Phe Leu Thr Gln Ile Leu Leu Arg Pro Gly Ala  
 165 170 175  
 Ser Asp Leu Thr Gly Ser Phe Arg Leu Tyr Arg Lys Glu Val Leu Glu  
 180 185 190  
 Lys Leu Ile Glu Lys Cys Val Ser Lys Gly Tyr Val Phe Gln Met Glu  
 195 200 205  
 Met Ile Val Arg Ala Arg Gln Leu Asn Tyr Thr Ile Gly Glu Val Pro  
 210 215 220  
 Ile Ser Phe Val Asp Arg Val Tyr Gly Glu Ser Lys Leu Gly Gly Asn  
 225 230 235 240  
 Glu Ile Val Ser Phe Leu Lys Gly Leu Leu Thr Leu Phe Ala Thr Thr  
 245 250 255

&lt;210&gt; 884

&lt;211&gt; 449

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 884

Gly Gly Ser Trp Cys Arg Ser Ser Pro Gly Arg Asp Gly Ser Pro Gly  
 1 5 10 15

Ala Lys Gly Asp Arg Gly Glu Thr Gly Pro Ala Gly Pro Pro Gly Ala  
 20 25 30  
 Pro Gly Ala Pro Gly Ala Pro Gly Pro Val Gly Pro Ala Gly Lys Ser  
 35 40 45  
 Gly Asp Arg Gly Glu Thr Gly Pro Ala Gly Pro Ala Gly Pro Val Gly  
 50 55 60  
 Pro Val Gly Ala Arg Gly Pro Ala Gly Pro Gln Gly Pro Arg Gly Asp  
 65 70 75 80  
 Lys Gly Glu Thr Gly Glu Gln Gly Asp Arg Gly Ile Lys Gly His Arg  
 85 90 95  
 Gly Phe Ser Gly Leu Gln Gly Pro Pro Gly Pro Pro Gly Ser Pro Gly  
 100 105 110  
 Glu Gln Gly Pro Ser Gly Ala Ser Gly Pro Ala Gly Pro Arg Gly Pro  
 115 120 125  
 Pro Gly Ser Ala Gly Ala Pro Gly Lys Asp Gly Leu Asn Gly Leu Pro  
 130 135 140  
 Gly Pro Ile Gly Pro Pro Gly Pro Arg Gly Arg Thr Gly Asp Ala Gly  
 145 150 155 160  
 Pro Val Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro  
 165 170 175  
 Pro Ser Ala Gly Phe Asp Phe Ser Phe Leu Pro Gln Pro Pro Gln Glu  
 180 185 190  
 Lys Ala His Asp Gly Gly Arg Tyr Tyr Arg Ala Asp Asp Ala Asn Val  
 195 200 205  
 Val Arg Asp Arg Asp Leu Glu Val Asp Thr Thr Leu Lys Ser Leu Ser  
 210 215 220  
 Gln Gln Ile Glu Asn Ile Arg Ser Pro Glu Gly Ser Arg Lys Asn Pro  
 225 230 235 240  
 Ala Arg Thr Cys Arg Asp Leu Lys Met Cys His Ser Asp Trp Lys Ser  
 245 250 255  
 Gly Glu Tyr Trp Ile Asp Pro Asn Gln Gly Cys Asn Leu Asp Ala Ile  
 260 265 270  
 Lys Val Phe Cys Asn Met Glu Thr Gly Glu Thr Cys Val Tyr Pro Thr  
 275 280 285

833

Gln Pro Ser Val Ala Gln Lys Asn Trp Tyr Ile Ser Lys Asn Pro Lys  
 290 295 300  
 Asp Lys Arg His Val Trp Phe Gly Glu Ser Met Thr Asp Gly Phe Gln  
 305 310 315 320  
 Phe Glu Tyr Gly Gly Gln Gly Ser Asp Pro Ala Asp Val Ala Ile Gln  
 325 330 335  
 Leu Thr Phe Leu Arg Leu Met Ser Thr Glu Ala Ser Gln Asn Ile Thr  
 340 345 350  
 Tyr His Cys Lys Asn Ser Val Ala Tyr Met Asp Gln Gln Thr Gly Asn  
 355 360 365  
 Leu Lys Lys Ala Leu Leu Leu Gln Gly Ser Asn Glu Ile Glu Ile Arg  
 370 375 380  
 Ala Glu Gly Asn Ser Arg Phe Thr Tyr Ser Val Thr Val Asp Gly Cys  
 385 390 395 400  
 Thr Ser His Thr Gly Ala Trp Gly Lys Thr Val Ile Glu Tyr Lys Thr  
 405 410 415  
 Thr Lys Thr Ser Arg Leu Pro Ile Ile Asp Val Ala Pro Leu Asp Val  
 420 425 430  
 Gly Ala Pro Asp Gln Glu Phe Gly Phe Asp Val Gly Pro Val Cys Phe  
 435 440 445

Leu

&lt;210&gt; 885

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 885

Gly Lys Leu Val Thr Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp  
 1 5 10 15  
 Pro Arg Val Arg Trp Gly Phe Thr Lys Phe Asn Ala Asp Glu Phe Glu  
 20 25 30  
 Asp Met Val Ala Glu Lys Arg Leu Ile Pro Asp Gly Cys Gly Val Lys  
 35 40 45  
 Tyr Ile Pro Ser Arg Gly Pro Leu Asp Lys Trp Arg Ala Leu His Ser

834

50

55

60

&lt;210&gt; 886

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 886

```

Thr Thr Leu Arg Ala Leu Ala Leu Asn Leu Trp Pro Pro Lys Ser Arg
 1           5           10           15
Ser Leu Ile Ser Ser Trp Gln Ser Cys Gly Gln Glu Val Leu Lys Gly
          20           25           30
Lys Thr His Ser Asp Asn Cys Ser Pro Ile Tyr Gln Pro Ser Ala Gly
          35           40           45
Val Ser Asp Arg Gly Pro Leu Pro Pro Leu Glu Cys Ala Thr Tyr Glu
          50           55           60
Glu Cys Pro Met Gly Lys Arg Arg Leu Ser Cys Pro Leu Ala Ala Cys
          65           70           75           80
Ala Ser Ile Pro Gly Gln Lys Phe Pro Gln Glu Pro Leu Ala Leu Ala
          85           90           95
Gln Ser His Cys Glu Arg Arg Trp Glu Pro Thr Pro Leu Gly Glu Gly
          100          105          110
Ala Val Leu Leu Gly Thr Ser Gln His Gln Val Arg Ser Leu Lys Leu
          115          120          125

Lys Asn Val Asn
          130

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&lt;210&gt; 887

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 887

```

Gly Leu Ser Ser Glu Ala Arg Glu Lys Ser Ser Glu Pro Gln Glu Arg
 1           5           10           15

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835

Ser Ser Glu Pro Trp Glu Arg Ser Ser Glu Pro Trp Glu Gly Leu Val  
                   20                                  25                                  30

Thr Phe Glu Asp Val Ala Val Glu Phe Thr Gln Glu Glu Trp Ala Leu  
                   35                                  40                                  45

Leu Asp Pro Ala Gln Arg Thr Leu Tyr Arg Asp Val Met Leu Glu Asn  
                   50                                  55                                  60

Cys Arg Thr Trp Pro His  
                   65                                  70

&lt;210&gt; 888

&lt;211&gt; 373

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 888

Val Asp Pro Arg Val Arg Phe Arg Glu Glu Phe Leu Phe Ser Ser Leu  
                   1                                  5                                  10                                  15

Gln Glu Gly Arg Asp Lys Asp Thr Phe Ser Lys Met Ala Met Val Ser  
                   20                                  25                                  30

Glu Phe Leu Lys Gln Ala Trp Phe Ile Glu Asn Glu Glu Gln Glu Tyr  
                   35                                  40                                  45

Val Gln Thr Val Lys Ser Ser Lys Gly Gly Pro Gly Ser Ala Val Ser  
                   50                                  55                                  60

Pro Tyr Pro Thr Phe Asn Pro Ser Ser Asp Val Ala Ala Leu His Lys  
                   65                                  70                                  75                                  80

Ala Ile Met Val Lys Gly Val Asp Glu Ala Thr Ile Ile Asp Ile Leu  
                   85                                  90                                  95

Thr Lys Arg Asn Asn Ala Gln Arg Gln Gln Ile Lys Ala Ala Tyr Leu  
                   100                                  105                                  110

Gln Glu Thr Gly Lys Pro Leu Asp Glu Thr Leu Lys Lys Ala Leu Thr  
                   115                                  120                                  125

Gly His Leu Glu Glu Val Val Leu Ala Leu Leu Lys Thr Pro Ala Gln  
                   130                                  135                                  140

Phe Asp Ala Asp Glu Leu Arg Ala Ala Met Lys Gly Leu Gly Thr Asp  
                   145                                  150                                  155                                  160

Glu Asp Thr Leu Ile Glu Ile Leu Ala Ser Arg Thr Asn Lys Glu Ile

836

165 170 175

Arg Asp Ile Asn Arg Val Tyr Arg Glu Glu Leu Lys Arg Asp Leu Ala  
180 185 190

Lys Asp Ile Thr Ser Asp Thr Ser Gly Asp Phe Arg Asn Ala Leu Leu  
195 200 205

Ser Leu Ala Lys Gly Asp Arg Ser Glu Asp Phe Gly Val Asn Glu Asp  
210 215 220

Leu Ala Asp Ser Asp Ala Arg Ala Leu Tyr Glu Ala Gly Glu Arg Arg  
225 230 235 240

Lys Gly Thr Asp Val Asn Val Phe Asn Thr Ile Leu Thr Thr Arg Ser  
245 250 255

Tyr Pro Gln Leu Arg Arg Val Phe Gln Lys Tyr Thr Lys Tyr Ser Lys  
260 265 270

His Asp Met Asn Lys Val Leu Asp Leu Glu Leu Lys Gly Asp Ile Glu  
275 280 285

Lys Cys Leu Thr Ala Ile Val Lys Cys Ala Thr Ser Lys Pro Ala Phe  
290 295 300

Phe Ala Glu Lys Leu His Gln Ala Met Lys Gly Val Gly Thr Arg His  
305 310 315 320

Lys Ala Leu Ile Arg Ile Met Val Ser Arg Ser Glu Ile Asp Met Asn  
325 330 335

Asp Ile Lys Ala Phe Tyr Gln Lys Met Tyr Gly Ile Ser Leu Cys Gln  
340 345 350

Ala Ile Leu Asp Glu Thr Lys Gly Asp Tyr Glu Lys Ile Leu Val Ala  
355 360 365

Leu Cys Gly Gly Asn  
370

&lt;210&gt; 889

&lt;211&gt; 336

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7).

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (60)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (67)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (100)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (183)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 889

Gly Arg Lys Lys His Leu Xaa Ala Arg Leu Val Thr Glu Met Asp Ser  
1 5 10 15

Lys Tyr Gln Cys Val Lys Leu Asn Asp Gly His Phe Met Pro Val Leu  
20 25 30

Gly Phe Gly Thr Tyr Ala Pro Ala Glu Val Pro Lys Ser Lys Ala Leu  
35 40 45

Glu Ala Xaa Lys Leu Ala Ile Glu Ala Gly Phe Xaa His Ile Asp Ser  
50 55 60

Ala His Xaa Tyr Asn Asn Glu Glu Gln Val Gly Leu Ala Ile Arg Ser  
65 70 75 80

Lys Ile Ala Asp Gly Ser Val Lys Arg Glu Asp Ile Phe Tyr Thr Ser  
85 90 95

Lys Leu Trp Xaa Asn Ser His Arg Pro Glu Leu Val Arg Pro Ala Leu  
100 105 110

Glu Arg Ser Leu Lys Asn Leu Gln Leu Asp Tyr Val Asp Leu Tyr Leu  
115 120 125

838

Ile His Phe Pro Val Ser Val Lys Pro Gly Glu Glu Val Ile Pro Lys  
130 135 140

Asp Glu Asn Gly Lys Ile Leu Phe Asp Thr Val Asp Leu Cys Ala Thr  
145 150 155 160

Trp Glu Ala Val Glu Lys Cys Lys Asp Ala Gly Leu Ala Lys Ser Ile  
165 170 175

Gly Val Ser Asn Phe Asn Xaa Arg Gln Leu Glu Met Ile Leu Asn Lys  
180 185 190

Pro Gly Leu Lys Tyr Lys Pro Val Cys Asn Gln Val Glu Cys His Pro  
195 200 205

Tyr Phe Asn Gln Arg Lys Leu Leu Asp Phe Cys Lys Ser Lys Asp Ile  
210 215 220

Val Leu Val Ala Tyr Ser Ala Leu Gly Ser His Arg Glu Glu Pro Trp  
225 230 235 240

Val Asp Pro Asn Ser Pro Val Leu Leu Glu Asp Pro Val Leu Cys Ala  
245 250 255

Leu Ala Lys Lys His Lys Arg Thr Pro Ala Leu Ile Ala Leu Arg Tyr  
260 265 270

Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys Ser Tyr Asn Glu Gln  
275 280 285

Arg Ile Arg Gln Asn Val Gln Val Phe Glu Phe Gln Leu Thr Ser Glu  
290 295 300

Glu Met Lys Ala Ile Asp Gly Leu Asn Arg Asn Val Arg Tyr Leu Thr  
305 310 315 320

Leu Asp Ile Phe Ala Gly Pro Pro Asn Tyr Pro Phe Ser Asp Glu Tyr  
325 330 335

&lt;210&gt; 890

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 890



839

```

Arg Ser Ser Glu Val Tyr Ala Gln Leu Cys Asn Val Ala Arg Ile Glu
 1              5              10              15

Ala Glu Arg Glu Ala Gly Val His Phe Arg Pro Gly Tyr Glu Tyr Gly
      20              25              30

Pro Gly Pro Asp Asp Leu His Tyr Ser Ile Tyr Gly Pro Asp Gly Ala
      35              40              45

Pro Phe Tyr Asn Tyr Leu Gly Pro Glu Asp Thr Val Pro Glu Pro Ala
      50              55              60

Phe Pro Asn Thr Ala Gly His Ser Ala Asp Arg Thr Pro Ile Leu Glu
65              70              75              80

Ser Pro Leu Gln Pro Ser Glu Leu Gln Pro His Tyr Val Ala Ser His
      85              90              95

Pro Glu Pro Pro Ala Gly Phe Glu Gly Leu Gln Ala Glu Glu Cys Gly
      100              105              110

Ile Leu Asn Gly Cys Glu Asn Gly Arg Cys Val Arg Val Arg Glu Gly
      115              120              125

Tyr Thr Cys Asp Cys Phe Glu Gly Phe Gln Leu Asp Ala Ala His Met
      130              135              140

Ala Cys Val Asp Val Asn Glu Cys Asp Asp Leu Asn Gly Pro Ala Val
      145              150              155              160

Leu Cys Val His Gly Tyr Cys Glu Asn Thr Glu Gly Ser Tyr Arg Cys
      165              170              175

His Cys Ser Pro Gly Tyr Val Ala Glu Ala Gly Pro Pro His Cys Thr
      180              185              190

Ala Lys Glu
      195

```

&lt;210&gt; 891

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (108)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

840

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (109)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 891

Ser Ala Gly Leu Thr Gly Arg Ile Ala Phe Ala Ala Ala Arg Pro Gln  
 1 5 10 15

Thr Phe Val Pro Gly Pro Ser Ser Pro Pro Pro Pro Pro Pro Arg  
 20 25 30

Pro Ala Glu Leu Ala Pro Ser Pro Pro Ala Asp Met Ser Glu Ser Lys  
 35 40 45

Ser Gly Pro Glu Tyr Ala Ser Phe Phe Ala Val Met Gly Ala Ser Ala  
 50 55 60

Ala Met Val Phe Ser Ala Leu Gly Ala Ala Tyr Gly Thr Ala Lys Ser  
 65 70 75 80

Gly Thr Gly Ile Ala Ala Met Ser Val Met Arg Pro Glu Gln Ile Met  
 85 90 95

Lys Ser Ile Ile Pro Val Val Met Ala Gly Ile Xaa Xaa Ile Tyr Gly  
 100 105 110

Leu Val Val Ala Val Leu Ile Ala Asn Ser Leu Asn Asp Asp Ile Ser  
 115 120 125

Leu Tyr Lys Ser Phe Leu Gln Leu Gly Ala Gly Leu Ser Val Gly Leu  
 130 135 140

Ser Gly Leu Ala Ala Gly Phe Ala Ile Gly Ile Val Gly Asp Ala Gly  
 145 150 155 160

Val Arg Gly Asn Ala Gln Gln Pro Arg Leu Phe Val Gly Met Ile Leu  
 165 170 175

Ile Leu Ile Phe Ala Glu Val Leu Gly Leu Tyr Gly Leu Ile Val Ala  
 180 185 190

Leu Ile Leu Ser Thr Lys  
 195

&lt;210&gt; 892

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

841

&lt;400&gt; 892

```

Asp Ala Trp Ala Pro Ser Glu Ser Arg Glu Ala Leu Leu Thr Pro Pro
 1              5              10              15

Pro His Arg Arg His Thr Ala Ala Ala Ser Val Met Pro Lys His Glu
          20              25              30

Phe Ser Val Asp Met Thr Cys Gly Gly Cys Ala Glu Ala Val Ser Arg
          35              40              45

Val Leu Asn Lys Leu Gly Gly Val Lys Tyr Asp Ile Asp Leu Pro Asn
 50              55              60

Lys Lys Val Cys Ile Glu Ser Glu His Ser Met Asp Thr Leu Leu Ala
 65              70              75              80

Thr Leu Lys Lys Thr Gly Lys Thr Val Ser Tyr Leu Gly Leu Glu
          85              90              95

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&lt;210&gt; 893

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (111)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (117)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 893

```

Gly Glu His Pro Arg Gln Pro Ala Gly Asn Asn Ile Leu Ala Val Leu
 1              5              10              15

Thr Cys Cys Gln Gln Ile His Arg Thr Trp Met Lys Phe Pro Phe Pro
          20              25              30

Leu Val Ser Ser Cys Ser Thr Pro Leu Leu Asp Pro Lys Ser Leu Thr
          35              40              45

Lys Ala Leu Asn Thr Val Lys Met Phe Tyr Ile Pro Phe His Leu Cys
 50              55              60

Cys Phe Phe Asn Cys Ile Leu Pro Asp Val Leu Met Leu Ser Leu Met

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842

65 70 75 80

Leu Ile Val Ile Pro Val Arg Val His Phe Ile Phe Met Leu Phe Gln  
85 90 95

Pro Cys Ile Asn Ile His Leu Thr Lys Ile Thr Gln Leu Ile Xaa Lys  
100 105 110

Lys Lys Lys Asn Xaa Gly Gly Gly Pro Gly Thr  
115 120

<210> 894  
<211> 172  
<212> PRT  
<213> Homo sapiens

<400> 894

Gln Phe Val Tyr Cys Gly Lys Lys Ala Gln Leu Asn Ile Gly Asn Val  
1 5 10 15

Leu Pro Val Gly Thr Met Pro Glu Gly Thr Ile Val Cys Cys Leu Glu  
20 25 30

Glu Lys Pro Gly Asp Arg Gly Lys Leu Ala Arg Ala Ser Gly Asn Tyr  
35 40 45

Ala Thr Val Ile Ser His Asn Pro Glu Thr Lys Lys Thr Arg Val Lys  
50 55 60

Leu Pro Ser Gly Ser Lys Lys Val Ile Ser Ser Ala Asn Arg Ala Val  
65 70 75 80

Val Gly Val Val Ala Gly Gly Gly Arg Ile Asp Lys Pro Ile Leu Lys  
85 90 95

Ala Gly Arg Ala Tyr His Lys Tyr Lys Ala Lys Arg Asn Cys Trp Pro  
100 105 110

Arg Val Arg Gly Val Ala Met Asn Pro Val Glu His Pro Phe Gly Gly  
115 120 125

Gly Asn His Gln His Ile Gly Lys Pro Ser Thr Ile Arg Arg Asp Ala  
130 135 140

Pro Ala Gly Arg Lys Val Gly Leu Ile Ala Ala Arg Arg Thr Gly Arg  
145 150 155 160

Leu Arg Gly Thr Lys Thr Val Gln Glu Lys Glu Asn  
165 170

843

<210> 895  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (22)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (37)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 895  
 Asn Arg Glu Gly Ser Lys Gly Val Glu Thr Arg Arg Val Leu Val Gly  
     1                    5                    10                    15  
 Glu Gln Gln Gln Cys Xaa Asp Ala Lys Ser Gln Gln Lys Glu Gln Met  
                     20                    25                    30  
 Leu Leu Leu Glu Xaa Lys Ser Ala Ala Tyr Ser Gln Val Leu Leu Arg  
                     35                    40                    45  
 Cys Leu Thr Leu Leu Gln Arg Leu Leu Gln Glu His Arg Leu Lys Thr  
                     50                    55                    60  
 Gln Ser Glu Leu Asp Arg Ile Asn Ala Gln Tyr Leu Glu Val Lys Cys  
                     65                    70                    75                    80  
 Gly Ala Met Ile Leu Lys Leu Arg Met Glu Glu Leu Lys Ile Leu Ser  
                     85                    90                    95  
 Asp Thr Tyr Thr Val Glu Lys Val Glu Val His Arg Leu Ile Arg Asp  
                     100                    105                    110  
 Arg Leu Glu Gly Ala Ile His Leu Gln Glu Gln Asp Met Glu Asn Ser  
                     115                    120                    125  
 Arg Gln Val Leu Asn Ser Tyr Glu Val Leu Gly Glu Glu Phe Asp Arg  
                     130                    135                    140  
 Leu Val Lys Glu Tyr Thr Val Leu Lys Gln Ala Thr Glu Asn Lys Arg  
                     145                    150                    155                    160  
 Trp Ala Leu Gln Glu Phe Ser Lys Val Tyr Arg  
                     165                    170

844

&lt;210&gt; 896

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 896

Arg Glu Val Met Lys Leu Tyr Leu Phe Gln Trp Ala Leu Phe His Phe  
1 5 10 15

Thr Thr Val Pro Leu Phe Gly Ser Trp Ser Tyr Thr Leu Ile Phe Ser  
20 25 30

Ile Leu Leu Leu Asn Tyr Gln His Lys Ala Ile Tyr Leu Lys Asp Ser  
35 40 45

Val Tyr Pro Ala Ile Ala Leu Lys Ser Ser Arg Lys Arg Asn Pro Leu  
50 55 60

Thr Cys Ile Ser Phe Cys Arg Ala Ser Leu Phe Ser Phe Val Leu Cys  
65 70 75 80

Phe Leu Pro Phe Glu Ser Asp Ser Val Leu Val Arg Lys Thr Ser Trp  
85 90 95

Asp His Ser

&lt;210&gt; 897

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (255)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 897

Ala Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Pro Thr Arg Arg Pro  
1 5 10 15

Arg Val Arg Gly Arg Ser Gln Leu Ser Ala His Gly Pro Ala Ser Phe  
20 25 30

Lys Met Ser Thr Val His Glu Ile Leu Cys Lys Leu Ser Leu Glu Gly  
35 40 45

845

Asp His Ser Thr Pro Pro Ser Ala Tyr Gly Ser Val Lys Ala Tyr Thr  
 50 55 60

Asn Phe Asp Ala Glu Arg Asp Ala Leu Asn Ile Glu Thr Ala Ile Lys  
 65 70 75 80

Thr Lys Gly Val Asp Glu Val Thr Ile Val Asn Ile Leu Thr Asn Arg  
 85 90 95

Ser Asn Ala Gln Arg Gln Asp Ile Ala Phe Ala Tyr Gln Arg Arg Thr  
 100 105 110

Lys Lys Glu Leu Ala Ser Ala Leu Lys Ser Ala Leu Ser Gly His Leu  
 115 120 125

Glu Thr Val Ile Leu Gly Leu Leu Lys Thr Pro Ala Gln Tyr Asp Ala  
 130 135 140

Ser Glu Leu Lys Ala Ser Met Lys Gly Leu Gly Thr Asp Glu Asp Ser  
 145 150 155 160

Leu Ile Glu Ile Ile Cys Ser Arg Thr Asn Gln Glu Leu Gln Glu Ile  
 165 170 175

Asn Arg Val Tyr Lys Glu Met Tyr Lys Thr Asp Leu Glu Lys Asp Ile  
 180 185 190

Ile Ser Asp Thr Ser Gly Asp Phe Arg Lys Leu Met Val Ala Leu Ala  
 195 200 205

Lys Gly Arg Arg Ala Glu Asp Gly Ser Val Ile Asp Tyr Glu Leu Ile  
 210 215 220

Asp Gln Asp Ala Arg Asp Leu Tyr Asp Ala Gly Val Lys Arg Lys Gly  
 225 230 235 240

Thr Asp Val Pro Lys Trp Ile Ser Ile Met Thr Glu Arg Ser Xaa Pro  
 245 250 255

Thr Ser Arg Lys Tyr Leu Ile Gly Thr Arg Val Thr Ala Leu Met Thr  
 260 265 270

Cys Trp Lys Ala Ser Gly Lys Arg Leu Lys Glu Thr Trp Lys Met Leu  
 275 280 285

Ser

846

&lt;210&gt; 898

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (205)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 898

Asn Pro Arg Gly Lys Val Ala Gly Phe Asp Leu Asp Gly Thr Leu Ile  
 1 5 10 15

Thr Thr Arg Ser Gly Lys Val Phe Pro Thr Gly Pro Ser Asp Trp Arg  
 20 25 30

Ile Leu Tyr Pro Glu Ile Pro Arg Lys Leu Arg Glu Leu Glu Ala Glu  
 35 40 45

Gly Tyr Lys Leu Val Ile Phe Thr Asn Gln Met Ser Ile Gly Arg Gly  
 50 55 60

Lys Leu Pro Ala Glu Glu Phe Lys Ala Lys Val Glu Ala Val Val Glu  
 65 70 75 80

Lys Leu Gly Val Pro Phe Gln Val Leu Val Ala Thr His Ala Gly Leu  
 85 90 95

Tyr Arg Lys Pro Val Thr Gly Met Trp Asp His Leu Gln Glu Gln Ala  
 100 105 110

Asn Asp Gly Thr Pro Ile Ser Ile Gly Asp Ser Ile Phe Val Gly Asp  
 115 120 125

Ala Ala Gly Arg Pro Ala Asn Trp Ala Pro Gly Arg Lys Lys Lys Asp  
 130 135 140

Phe Ser Cys Ala Asp Arg Leu Phe Ala Leu Asn Leu Gly Leu Pro Phe  
 145 150 155 160

Ala Thr Pro Glu Glu Phe Phe Leu Lys Trp Pro Ala Ala Gly Phe Glu  
 165 170 175

Leu Pro Ala Phe Asp Pro Arg Thr Val Ser Arg Ser Gly Pro Leu Cys  
 180 185 190

Leu Pro Glu Ser Arg Ala Leu Leu Ser Ala Thr Arg Xaa Trp Leu Ser  
 195 200 205

Gln Trp Asp Ser Leu Gly Pro Gly Ser Pro Pro Phe Ser Arg Ser Thr



847

210                      215                      220  
 Ser Cys Arg Pro Asp Met Ser Thr  
 225                      230

<210> 899  
 <211> 218  
 <212> PRT  
 <213> Homo sapiens

<400> 899  
 Leu Arg Val Ala Arg Pro Asp Ala Ala Arg Ala Ala Pro Leu Ala Pro  
 1                      5                      10                      15  
 Ala Ala Ala Met Lys Ala Val Val Gln Arg Val Thr Arg Ala Ser Val  
 20                      25                      30  
 Thr Val Gly Gly Glu Gln Ile Ser Ala Ile Gly Arg Gly Ile Cys Val  
 35                      40                      45  
 Leu Leu Gly Ile Ser Leu Glu Asp Thr Gln Lys Glu Leu Glu His Met  
 50                      55                      60  
 Val Arg Lys Ile Leu Asn Leu Arg Val Phe Glu Asp Glu Ser Gly Lys  
 65                      70                      75                      80  
 His Trp Ser Lys Ser Val Met Asp Lys Gln Tyr Glu Ile Leu Cys Val  
 85                      90                      95  
 Ser Gln Phe Thr Leu Gln Cys Val Leu Lys Gly Asn Lys Pro Asp Phe  
 100                      105                      110  
 His Leu Ala Met Pro Thr Glu Gln Ala Glu Gly Phe Tyr Asn Ser Phe  
 115                      120                      125  
 Leu Glu Gln Leu Arg Lys Thr Tyr Arg Pro Glu Leu Ile Lys Asp Gly  
 130                      135                      140  
 Lys Phe Gly Ala Tyr Met Gln Val His Ile Gln Asn Asp Gly Pro Val  
 145                      150                      155                      160  
 Thr Ile Glu Leu Glu Ser Pro Ala Pro Gly Thr Ala Thr Ser Asp Pro  
 165                      170                      175  
 Lys Gln Leu Ser Lys Leu Glu Lys Gln Gln Gln Arg Lys Glu Lys Thr  
 180                      185                      190  
 Arg Ala Lys Gly Pro Ser Glu Phe Lys Gln Gly Lys Lys His Ser Pro  
 195                      200                      205

Lys Arg Arg Pro Gln Cys Gln Gln Arg Gly  
 210 215

<210> 900

<211> 152

<212> PRT

<213> Homo sapiens

<400> 900

Ser Lys Arg Gly His Val Pro Trp Gly Leu Glu Glu Ile Leu Asp Val  
 1 5 10 15  
 Ile Glu Pro Ser Gln Phe Val Lys Ile Gln Glu Pro Leu Phe Lys Gln  
 20 25 30  
 Ile Ala Lys Cys Val Ser Ser Pro His Phe Gln Val Ala Glu Arg Ala  
 35 40 45  
 Leu Tyr Tyr Trp Asn Asn Glu Tyr Ile Met Ser Leu Ile Glu Glu Asn  
 50 55 60  
 Ser Asn Val Ile Leu Pro Ile Met Phe Ser Ser Leu Tyr Arg Ile Ser  
 65 70 75 80  
 Lys Glu His Trp Asn Pro Ala Ile Val Ala Leu Val Tyr Asn Val Leu  
 85 90 95  
 Lys Ala Phe Met Glu Met Asn Ser Thr Met Phe Asp Glu Leu Thr Ala  
 100 105 110  
 Thr Tyr Lys Ser Asp Arg Gln Arg Glu Lys Lys Lys Glu Lys Glu Arg  
 115 120 125  
 Glu Glu Leu Trp Lys Lys Leu Glu Asp Leu Glu Leu Lys Arg Gly Leu  
 130 135 140  
 Arg Arg Asp Gly Ile Ile Pro Thr  
 145 150

<210> 901

<211> 261

<212> PRT

<213> Homo sapiens

<400> 901

Gly Leu Arg Glu Ile Ser Gly Arg Leu Ala Glu Met Pro Ala Asp Ser

849

1	5	10	15
Gly Tyr Pro Ala Tyr Leu Gly Ala Arg Leu Ala Ser Phe Tyr Glu Arg	20	25	30
Ala Gly Arg Val Lys Cys Leu Gly Asn Pro Glu Arg Glu Gly Ser Val	35	40	45
Ser Ile Val Gly Ala Val Ser Pro Pro Gly Gly Asp Phe Ser Asp Pro	50	55	60
Val Thr Ser Ala Thr Leu Gly Ile Val Gln Val Phe Trp Gly Leu Asp	65	70	75
Lys Lys Leu Ala Gln Arg Lys His Phe Pro Ser Val Asn Trp Leu Ile	85	90	95
Ser Tyr Ser Lys Tyr Met Arg Ala Leu Asp Glu Tyr Tyr Asp Lys His	100	105	110
Phe Thr Glu Phe Val Pro Leu Arg Thr Lys Ala Lys Glu Ile Leu Gln	115	120	125
Glu Glu Glu Asp Leu Ala Glu Ile Val Gln Leu Val Gly Lys Ala Ser	130	135	140
Leu Ala Glu Thr Asp Lys Ile Thr Leu Glu Val Ala Lys Leu Ile Lys	145	150	155
Asp Asp Phe Leu Gln Gln Asn Gly Tyr Thr Pro Tyr Asp Arg Phe Cys	165	170	175
Pro Phe Tyr Lys Thr Val Gly Met Leu Ser Asn Met Ile Ala Phe Tyr	180	185	190
Asp Met Ala Arg Arg Val Phe Glu Thr Thr Ala Gln Ser Asp Asn Lys	195	200	205
Ile Thr Trp Ser Ile Ile Arg Glu His Met Gly Asp Ile Leu Tyr Lys	210	215	220
Leu Ser Ser Met Lys Phe Lys Asp Pro Leu Lys Asp Gly Glu Ala Lys	225	230	235
Ile Lys Ser Asp Tyr Ala Gln Leu Leu Glu Asp Met Gln Asn Ala Phe	245	250	255
Arg Ser Leu Glu Asp	260		

850

&lt;210&gt; 902

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (33)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 902

Phe Pro Gly Arg Pro Thr Arg Pro Arg Gly Ile Ser Val Ser Gly Gly  
1 5 10 15

Glu Ala Val Cys Pro Val Gln Trp Arg Leu Arg Lys Leu Ala Ala Ala  
20 25 30

Xaa Gly Lys Gly Gln Glu Val Glu Thr Ser Val Thr Tyr Tyr Arg Leu  
35 40 45

Glu Glu Val Ala Lys Arg Asn Ser Leu Lys Glu Leu Trp Leu Val Ile  
50 55 60

His Gly Arg Val Tyr Asp Val Thr Arg Phe Leu Asn Glu His Pro Gly  
65 70 75 80

Gly Glu Glu Val Leu Leu Glu Gln Ala Gly Val Asp Ala Ser Glu Ser  
85 90 95

Phe Glu Asp Val Gly His Ser Ser Asp Ala Arg Glu Met Leu Lys Gln  
100 105 110

Tyr Tyr Ile Gly Asp Ile His Pro Ser Asp Leu Lys Pro Glu Ser Gly  
115 120 125

Ser Lys Asp Pro Ser Lys Asn Asp Thr Cys Lys Ser Cys Trp Ala Tyr  
130 135 140

Trp Ile Leu Pro Ile Ile Gly Ala Val Leu Leu Gly Phe Leu Tyr Arg  
145 150 155 160

Tyr Tyr Thr Ser Glu Ser Lys Ser Ser  
165

&lt;210&gt; 903

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

851

<220>  
<221> SITE  
<222> (15)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (19)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 903  
Pro Leu Cys Leu Ala Lys Asn Lys Asn Phe Leu Ile Leu Arg Xaa Asn  
1 5 10 15  
Ile Gln Xaa Ile His Ile Lys Ser Leu Glu Asn Ile Ile Pro Phe Asp  
20 25 30  
Ser Leu Ile Thr Leu Leu Glu Tyr Lys Glu Met Ile Leu Asn Ile Tyr  
35 40 45  
Val Val Leu Trp Ser  
50

<210> 904  
<211> 329  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (3)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (5)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (36)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 904  
Arg Arg Xaa Ala Xaa Pro Arg Val Arg Trp Lys Ile Cys Gly Leu Ser  
1 5 10 15  
Pro Thr Thr Thr Leu Ala Ile Tyr Phe Glu Val Val Asn Gln His Asn

20	25	30
Ala Pro Ile Xaa Gln Gly Gly Arg Gly Ala Ile Gln Phe Val Thr Gln		
35	40	45
Tyr Gln His Ser Ser Gly Gln Arg Arg Ile Arg Val Thr Thr Ile Ala		
50	55	60
Arg Asn Trp Ala Asp Ala Gln Thr Gln Ile Gln Asn Ile Ala Ala Ser		
65	70	75
Phe Asp Gln Glu Ala Ala Ala Ile Leu Met Ala Arg Leu Ala Ile Tyr		
85	90	95
Arg Ala Glu Thr Glu Glu Gly Pro Asp Val Leu Arg Trp Leu Asp Arg		
100	105	110
Gln Leu Ile Arg Leu Cys Gln Lys Phe Gly Glu Tyr His Lys Asp Asp		
115	120	125
Pro Ser Ser Phe Arg Phe Ser Glu Thr Phe Ser Leu Tyr Pro Gln Phe		
130	135	140
Met Phe His Leu Arg Arg Ser Ser Phe Leu Gln Val Phe Asn Asn Ser		
145	150	155
Pro Asp Glu Ser Ser Tyr Tyr Arg His His Phe Met Arg Gln Asp Leu		
165	170	175
Thr Gln Ser Leu Ile Met Ile Gln Pro Ile Leu Tyr Ala Tyr Ser Phe		
180	185	190
Ser Gly Pro Pro Glu Pro Val Leu Leu Asp Ser Ser Ser Ile Leu Ala		
195	200	205
Asp Arg Ile Leu Leu Met Asp Thr Phe Phe Gln Ile Leu Ile Tyr His		
210	215	220
Gly Glu Thr Ile Ala Gln Trp Arg Lys Ser Gly Tyr Gln Asp Met Pro		
225	230	235
Glu Tyr Glu Asn Phe Arg His Leu Leu Gln Ala Pro Val Asp Asp Ala		
245	250	255
Gln Glu Ile Leu His Ser Arg Phe Pro Met Pro Arg Tyr Ile Asp Thr		
260	265	270
Glu His Gly Gly Ser Gln Ala Arg Phe Leu Leu Ser Lys Val Asn Pro		
275	280	285
Ser Gln Thr His Asn Asn Met Tyr Ala Trp Gly Gln Glu Ser Gly Ala		

853

290

295

300

Pro Ile Leu Thr Asp Asp Val Ser Leu Gln Val Phe Met Asp His Leu  
 305 310 315 320

Lys Lys Leu Ala Val Ser Ser Ala Ala  
 325

&lt;210&gt; 905

&lt;211&gt; 264

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 905

Phe Leu Leu Pro Thr Leu Trp Phe Cys Ser Pro Ser Ala Lys Tyr Phe  
 1 5 10 15

Phe Lys Met Ala Phe Tyr Asn Gly Trp Ile Leu Phe Leu Ala Val Leu  
 20 25 30

Ala Ile Pro Val Cys Ala Val Arg Gly Arg Asn Val Glu Asn Met Xaa  
 35 40 45

Ile Leu Arg Leu Met Leu Leu His Ile Lys Tyr Leu Tyr Gly Ile Arg  
 50 55 60

Val Glu Val Arg Gly Ala His His Phe Pro Pro Ser Gln Pro Tyr Val  
 65 70 75 80

Val Val Ser Asn His Gln Ser Ser Leu Asp Leu Leu Gly Met Met Glu  
 85 90 95

Val Leu Pro Gly Arg Cys Val Pro Ile Ala Lys Arg Glu Leu Leu Trp  
 100 105 110

Ala Gly Ser Ala Gly Leu Ala Cys Trp Leu Ala Gly Val Ile Phe Ile  
 115 120 125

Asp Arg Lys Arg Thr Gly Asp Ala Ile Ser Val Met Ser Glu Val Ala  
 130 135 140

Gln Thr Leu Leu Thr Gln Asp Val Arg Val Trp Val Phe Pro Glu Gly  
 145 150 155 160

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<210> 906
<211> 189
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 906  
Xaa Xaa Pro Xaa Pro Glu Phe Pro Gly Arg Thr His Ala Ser Gly Leu  
1 5 10 15

Leu Arg Ser Arg Leu Ala Leu Arg Trp Leu Ser His Val Arg Arg Pro  
20 25 30

Ser Arg Arg Val Pro Arg Met Pro Arg Gly Ser Arg Ser Arg Thr Ser



855

35 40 45

Arg Met Ala Pro Pro Ala Ser Arg Ala Pro Gln Met Arg Ala Ala Pro  
50 55 60

Arg Pro Ala Pro Val Ala Gln Pro Pro Ala Ala Ala Pro Pro Ser Ala  
65 70 75 80

Val Gly Ser Ser Ala Ala Ala Pro Arg Gln Pro Gly Leu Met Ala Gln  
85 90 95

Met Ala Thr Thr Ala Ala Gly Val Ala Val Gly Ser Ala Val Gly His  
100 105 110

Thr Leu Gly His Ala Ile Thr Gly Gly Phe Ser Gly Gly Ser Asn Ala  
115 120 125

Glu Pro Ala Arg Pro Asp Ile Thr Tyr Gln Glu Pro Gln Gly Thr Gln  
130 135 140

Pro Ala Gln Gln Gln Gln Pro Cys Leu Tyr Glu Ile Lys Gln Phe Leu  
145 150 155 160

Glu Cys Ala Gln Asn Gln Gly Asp Ile Lys Leu Cys Glu Gly Phe Asn  
165 170 175

Glu Val Leu Lys Gln Cys Arg Leu Ala Asn Gly Leu Ala  
180 185

&lt;210&gt; 907

&lt;211&gt; 638

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (52)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

856

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (427)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 907

Tyr Val Gln Gly Tyr Ser Leu Ser Gln Ala Asp Val Asp Ala Phe Arg  
 1 5 10 15

Gln Leu Ser Ala Pro Pro Ala Asp Pro Gln Leu Phe His Val Ala Arg  
 20 25 30

Trp Phe Arg His Ile Glu Ala Leu Leu Gly Xaa Pro Cys Gly Lys Gly  
 35 40 45

Gln Pro Cys Xaa Leu Pro Ser Xaa Gln Arg Pro Ala Cys Ala Ala Pro  
 50 55 60

Val Val Pro Ser Cys Trp Asp Pro Xaa Cys Arg Leu His Leu Tyr Asn  
 65 70 75 80

Ser Leu Thr Arg Asn Lys Glu Val Phe Ile Pro Gln Asp Gly Lys Lys  
 85 90 95

Val Thr Trp Tyr Cys Cys Gly Pro Thr Val Tyr Asp Ala Ser His Met  
 100 105 110

Gly His Ala Arg Ser Tyr Ile Ser Phe Asp Ile Leu Arg Arg Val Leu  
 115 120 125

Lys Asp Tyr Phe Lys Phe Asp Val Phe Tyr Cys Met Asn Ile Thr Asp  
 130 135 140

Ile Asp Asp Lys Ile Ile Lys Arg Ala Arg Gln Asn His Leu Phe Glu  
 145 150 155 160

Gln Tyr Arg Glu Lys Arg Pro Glu Ala Ala Gln Leu Leu Glu Asp Val  
 165 170 175

Gln Ala Ala Leu Lys Pro Phe Ser Val Lys Leu Asn Glu Thr Thr Asp  
 180 185 190

Pro Asp Lys Lys Gln Met Leu Glu Arg Ile Gln His Ala Val Gln Leu  
 195 200 205

Ala Thr Glu Pro Leu Glu Lys Ala Val Gln Ser Arg Leu Thr Gly Glu

857

210	215	220
Glu Val Asn Ser Cys Val	Glu Val Leu Leu Glu Glu Ala Lys Asp Leu	
225	230	235 240
Leu Ser Asp Trp Leu Asp Ser Thr Leu Gly Cys Asp Val Thr Asp Asn		
	245	250 255
Ser Ile Phe Ser Lys Leu Pro Lys Phe Trp Glu Gly Asp Phe His Arg		
	260	265 270
Asp Met Glu Ala Leu Asn Val Leu Pro Pro Asp Val Leu Thr Arg Val		
	275	280 285
Ser Glu Tyr Val Pro Glu Ile Val Asn Phe Val Gln Lys Ile Val Asp		
	290	295 300
Asn Gly Tyr Gly Tyr Val Ser Asn Gly Ser Val Tyr Phe Asp Thr Ala		
	305	310 315 320
Lys Phe Ala Ser Ser Glu Lys His Ser Tyr Gly Lys Leu Val Pro Glu		
	325	330 335
Ala Val Gly Asp Gln Lys Ala Leu Gln Glu-Gly Glu Gly Asp Leu Ser		
	340	345 350
Ile Ser Ala Asp Arg Leu Ser Glu Lys Arg Ser Pro Asn Asp Phe Ala		
	355	360 365
Leu Trp Lys Ala Ser Lys Pro Gly Glu Pro Ser Trp Pro Cys Pro Trp		
	370	375 380
Gly Lys Gly Arg Pro Gly Trp His Ile Glu Cys Ser Ala Met Ala Gly		
	385	390 395 400
Thr Leu Leu Gly Ala Ser Met Asp Ile His Gly Gly Gly Phe Asp Leu		
	405	410 415
Arg Phe Pro His His Asp Asn Glu Leu Ala Xaa Ser Glu Ala Tyr Phe		
	420	425 430
Glu Asn Asp Cys Trp Val Arg Tyr Phe Leu His Thr Gly His Leu Thr		
	435	440 445
Ile Ala Gly Cys Lys Met Ser Lys Ser Leu Lys Asn Phe Ile Thr Ile		
	450	455 460
Lys Asp Ala Leu Lys Lys His Ser Ala Arg Gln Leu Arg Leu Ala Phe		
	465	470 475 480
Leu Met His Ser Trp Lys Asp Thr Leu Asp Tyr Ser Ser Asn Thr Met		

858

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<210> 908
<211> 248
<212> PRT
<213> Homo sapiens

<400> 908
Ser His Pro Leu Arg Ser Arg Leu Pro Ser Ala Thr Gly Val Gly His
 1             5             10             15
Ala Leu Ala Arg Ser Phe Cys Arg His Leu Gly Ser Ala Phe Pro Ala
      20             25             30
Gln Asn Ala Arg Arg Ser Thr Glu Thr Val Pro Ala Thr Glu Gln Glu
      35             40             45
Leu Pro Gln Pro Gln Ala Glu Thr Gly Ser Gly Thr Glu Ser Asp Ser
      50             55             60
Asp Glu Ser Val Pro Glu Leu Glu Glu Gln Asp Ser Thr Gln Ala Thr
      65             70             75             80

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859

Thr Gln Gln Ala Gln Leu Ala Ala Ala Ala Glu Ile Asp Glu Glu Pro  
85 90 95

Val Ser Lys Ala Lys Gln Ser Arg Ser Glu Lys Lys Ala Arg Lys Ala  
100 105 110

Met Ser Lys Leu Gly Leu Arg Gln Val Thr Gly Val Thr Arg Val Thr  
115 120 125

Ile Arg Lys Ser Lys Asn Ile Leu Phe Val Ile Thr Lys Pro Asp Val  
130 135 140

Tyr Lys Ser Pro Ala Ser Asp Thr Tyr Ile Val Phe Gly Glu Ala Lys  
145 150 155 160

Ile Glu Asp Leu Ser Gln Gln Ala Gln Leu Ala Ala Ala Glu Lys Phe  
165 170 175

Lys Val Gln Gly Glu Ala Val Ser Asn Ile Gln Glu Asn Thr Gln Thr  
180 185 190

Pro Thr Val Gln Glu Glu Ser Glu Glu Glu Glu Val Asp Glu Thr Gly  
195 200 205

Val Glu Val Lys Asp Ile Glu Leu Val Met Ser Gln Ala Asn Val Ser  
210 215 220

Arg Ala Lys Ala Val Arg Ala Leu Lys Asn Asn Ser Asn Asp Ile Val  
225 230 235 240

Asn Ala Ile Met Glu Leu Thr Met  
245

&lt;210&gt; 909

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (158)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

860

&lt;400&gt; 909

Gln Gly Cys Cys Tyr Gly Ala Gly Arg Arg Val Ala Arg Leu Leu Ala  
 1 5 10 15

Pro Leu Met Trp Arg Arg Ala Val Ser Ser Val Ala Gly Ser Ala Val  
 20 25 30

Gly Ala Glu Pro Gly Leu Arg Leu Leu Ala Val Gln Arg Xaa Pro Val  
 35 40 45

Glu Gln Arg Ser Ala Gly Leu Ala Arg Pro Gln Thr Leu Ser Ala Ala  
 50 55 60

Cys Thr Ala Lys Pro Gly Leu Glu Glu Arg Ala Glu Gly Thr Val Asn  
 65 70 75 80

Glu Gly Arg Pro Glu Ser Asp Ala Ala Asp His Thr Gly Pro Lys Phe  
 85 90 95

Asp Ile Asp Met Met Val Ser Leu Leu Arg Gln Glu Asn Ala Arg Asp  
 100 105 110

Ile Cys Val Ile Gln Val Pro Pro Glu Met Arg Tyr Thr Asp Tyr Phe  
 115 120 125

Val Ile Val Ser Gly Thr Ser Thr Arg His Leu His Ala Met Ala Phe  
 130 135 140

Tyr Val Val Lys Met Tyr Lys His Leu Lys Cys Lys Arg Xaa Pro Ser  
 145 150 155 160

Cys

&lt;210&gt; 910

&lt;211&gt; 487

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 910

Lys Ala Ala Ser Gly Pro Ala Thr Ser Ile Thr Gly Val Thr Met Gly  
 1 5 10 15

Ala Val Leu Gly Val Phe Ser Leu Ala Ser Trp Val Pro Cys Leu Cys  
 20 25 30

Ser Gly Ala Ser Cys Leu Leu Cys Ser Cys Cys Pro Asn Ser Lys Asn  
 35 40 45

861

Ser Thr Val Thr Arg Leu Ile Tyr Ala Phe Ile Leu Leu Leu Ser Thr  
50 55 60

Val Val Ser Tyr Ile Met Gln Arg Lys Glu Met Glu Thr Tyr Leu Lys  
65 70 75 80

Lys Ile Pro Gly Phe Cys Glu Gly Gly Phe Lys Ile His Glu Ala Asp  
85 90 95

Ile Asn Ala Asp Lys Asp Cys Asp Val Leu Val Gly Tyr Lys Ala Val  
100 105 110

Tyr Arg Ile Ser Phe Ala Met Ala Ile Phe Phe Phe Val Phe Ser Leu  
115 120 125

Leu Met Phe Lys Val Lys Thr Ser Lys Asp Leu Arg Ala Ala Val His  
130 135 140

Asn Gly Phe Trp Phe Phe Lys Ile Ala Ala Leu Ile Gly Ile Met Val  
145 150 155 160

Gly Ser Phe Tyr Ile Pro Gly Gly Tyr Phe Ser Ser Val Trp Phe Val  
165 170 175

Val Gly Met Ile Gly Ala Ala Leu Phe Ile Leu Ile Gln Leu Val Leu  
180 185 190

Leu Val Asp Phe Ala His Ser Trp Asn Glu Ser Trp Val Asn Arg Met  
195 200 205

Glu Glu Gly Asn Pro Arg Leu Trp Tyr Ala Ala Leu Leu Ser Phe Thr  
210 215 220

Ser Ala Phe Tyr Ile Leu Ser Ile Ile Cys Val Gly Leu Leu Tyr Thr  
225 230 235 240

Tyr Tyr Thr Lys Pro Asp Gly Cys Thr Glu Asn Lys Phe Phe Ile Ser  
245 250 255

Ile Asn Leu Ile Leu Cys Val Val Ala Ser Ile Ile Ser Ile His Pro  
260 265 270

Lys Ile Gln Glu His Gln Pro Arg Ser Gly Leu Leu Gln Ser Ser Leu  
275 280 285

Ile Thr Leu Tyr Thr Met Tyr Leu Thr Trp Ser Ala Met Ser Asn Glu  
290 295 300

Pro Asp Arg Ser Cys Asn Pro Asn Leu Met Ser Phe Ile Thr Arg Ile  
305 310 315 320

862

Thr Ala Pro Thr Leu Ala Pro Gly Asn Ser Thr Ala Val Val Pro Thr  
 325 330 335  
 Pro Thr Pro Pro Ser Lys Ser Gly Ser Leu Leu Asp Ser Asp Asn Phe  
 340 345 350  
 Ile Gly Leu Phe Val Phe Val Leu Cys Leu Leu Tyr Ser Ser Ile Arg  
 355 360 365  
 Thr Ser Thr Asn Ser Gln Val Asp Lys Leu Thr Leu Ser Gly Ser Asp  
 370 375 380  
 Ser Val Ile Leu Gly Asp Thr Thr Thr Ser Gly Ala Ser Asp Glu Glu  
 385 390 395 400  
 Asp Gly Gln Pro Arg Arg Ala Val Asp Asn Glu Lys Glu Gly Val Gln  
 405 410 415  
 Tyr Ser Tyr Ser Leu Phe His Leu Met Leu Cys Leu Ala Ser Leu Tyr  
 420 425 430  
 Ile Met Met Thr Leu Thr Ser Trp Tyr Ser Pro Asp Ala Lys Phe Gln  
 435 440 445  
 Ser Met Thr Ser Lys Trp Pro Ala Val Trp Val Lys Ile Ser Ser Ser  
 450 455 460  
 Trp Val Cys Leu Leu Leu Tyr Val Trp Thr Leu Val Ala Pro Leu Val  
 465 470 475 480  
 Leu Thr Ser Arg Asp Phe Ser  
 485

&lt;210&gt; 911

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (69)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 911

Asp Pro Arg Val Arg His Arg Gly Asn Lys Val Val Lys Lys Lys Val  
 1 5 10 15  
 Leu Val Arg Cys Arg His Phe Ile Cys Pro His Ser Leu Arg Leu Ser  
 20 25 30



863

Gln Ser Phe Gln Gln Arg Tyr Val Gly Pro Glu His Pro Glu Phe Thr  
 35 40 45

Thr Ser Val Val Arg Arg Ala Thr Met Arg Arg Ala Leu Gly Arg Ile  
 50 55 60

Cys His Phe Gln Xaa Val Arg Gly Thr Ala Ser Leu Gly Glu Gly Ala  
 65 70 75 80

Leu Gly Cys Asp Ser Arg Thr Cys Lys Ala Ala Ser Gly Leu Trp Arg  
 85 90 95

Gly Arg

<210> 912  
 <211> 206  
 <212> PRT  
 <213> Homo sapiens

<400> 912  
 Phe Ser Leu Phe Pro Leu Ala Lys Ser Phe Asp Asp Gly Asp Tyr Phe  
 1 5 10 15

Pro Val Trp Gly Thr Cys Leu Gly Phe Glu Glu Leu Ser Leu Leu Ile  
 20 25 30

Ser Gly Glu Cys Leu Leu Thr Ala Thr Asp Thr Val Asp Val Ala Met  
 35 40 45

Pro Leu Asn Phe Thr Gly Gly Gln Leu His Ser Arg Met Phe Gln Asn  
 50 55 60

Phe Pro Thr Glu Leu Leu Ser Leu Ala Val Glu Pro Leu Thr Ala  
 65 70 75 80

Asn Phe His Lys Trp Ser Leu Ser Val Lys Asn Phe Thr Met Asn Glu  
 85 90 95

Lys Leu Lys Lys Phe Phe Asn Val Leu Thr Thr Asn Thr Asp Gly Lys  
 100 105 110

Ile Glu Phe Ile Ser Thr Met Glu Gly Tyr Lys Tyr Pro Val Tyr Gly  
 115 120 125

Val Gln Trp His Pro Glu Lys Ala Pro Tyr Glu Trp Lys Asn Leu Asp  
 130 135 140

864

Gly Ile Ser His Ala Pro Asn Ala Val Lys Thr Ala Phe Tyr Leu Ala  
145 150 155 160

Glu Phe Phe Val Asn Glu Ala Arg Lys Asn Asn His His Phe Lys Ser  
165 170 175

Glu Ser Glu Glu Glu Lys Ala Leu Ile Tyr Gln Phe Ser Pro Ile Tyr  
180 185 190

Thr Gly Asn Ile Ser Ser Phe Gln Gln Cys Tyr Ile Phe Asp  
195 200 205

&lt;210&gt; 913

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 913

Phe Ser Gly Pro Cys Pro Val Asn Thr Leu Gly Trp Glu Val Ser Ser  
1 5 10 15

Phe Ser Pro Leu Leu Ser Ser Cys Leu Asn Met Val Arg Thr Lys Ala  
20 25 30

Asp Ser Val Pro Gly Thr Tyr Arg Lys Val Val Ala Ala Arg Ala Pro  
35 40 45

Arg Lys Val Leu Gly Ser Ser Thr Ser Ala Thr Asn Ser Thr Ser Val  
50 55 60

Ser Ser Arg Lys Glu His Val Leu Cys Asn Leu Ile Thr Gln Met Met  
65 70 75 80

Lys Lys Asn Arg Thr Phe Ser Phe Ile Phe Glu  
85 90

&lt;210&gt; 914

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (132)

&lt;223&gt; xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

865

&lt;221&gt; SITE

&lt;222&gt; (147)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (154)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 914

Arg Glu Leu Ser Thr Arg Gln Arg Ser Gln Ala Lys Pro Pro Ala Ser  
 1 5 10 15

Met Ala Ser Glu Phe Lys Lys Lys Leu Phe Trp Arg Ala Val Val Ala  
 20 25 30

Glu Phe Leu Ala Thr Thr Leu Phe Val Phe Ile Ser Ile Gly Ser Ala  
 35 40 45

Leu Gly Phe Lys Tyr Pro Val Gly Asn Asn Gln Thr Ala Val Gln Asp  
 50 55 60

Asn Val Lys Val Ser Leu Ala Phe Gly Leu Ser Ile Ala Thr Leu Ala  
 65 70 75 80

Gln Ser Val Gly His Ile Ser Gly Ala His Leu Asn Pro Ala Val Thr  
 85 90 95

Leu Gly Leu Leu Leu Ser Cys Gln Ile Ser Ile Phe Arg Ala Leu Met  
 100 105 110

Tyr Ile Ile Ala Gln Cys Val Gly Ala Ile Val Ala Thr Ala Ile Leu  
 115 120 125

Ser Gly Ile Xaa Ser Ser Leu Thr Gly Asn Ser Leu Gly Arg Asn Asp  
 130 135 140

Leu Ala Xaa Gly Val Asn Phe Gly Pro Xaa Pro Gly His Arg Asp His  
 145 150 155 160

Arg Asp Pro Pro Ala Gly Ala Met Arg Ala Gly Tyr Tyr Arg Pro Glu  
 165 170 175

Ala Pro

&lt;210&gt; 915

&lt;211&gt; 377

&lt;212&gt; PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (355)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 915

Val Cys Ala His Gly Gln Gly Leu Leu Arg Tyr Phe Tyr Ser Arg Arg  
1 5 10 15

Ile Asp Ile Thr Leu Ser Ser Val Lys Cys Phe His Lys Leu Ala Ser  
20 25 30

Ala Tyr Gly Ala Arg Gln Leu Gln Gly Tyr Cys Ala Ser Leu Phe Ala  
35 40 45

Ile Leu Leu Pro Gln Asp Pro Ser Phe Gln Met Pro Leu Asp Leu Tyr  
50 55 60

Ala Tyr Ala Val Ala Thr Gly Asp Ala Leu Leu Glu Lys Leu Cys Leu  
65 70 75 80

Gln Phe Leu Ala Trp Asn Phe Glu Ala Leu Thr Gln Ala Glu Ala Trp  
85 90 95

Pro Ser Val Pro Thr Asp Leu Leu Gln Leu Leu Leu Pro Arg Ser Asp  
100 105 110

Leu Ala Val Pro Ser Glu Leu Ala Leu Leu Lys Ala Val Asp Thr Trp  
115 120 125

Ser Trp Gly Glu Arg Ala Ser His Glu Glu Val Glu Gly Leu Val Glu  
130 135 140

Lys Ile Arg Phe Pro Met Met Leu Pro Glu Glu Leu Phe Glu Leu Gln  
145 150 155 160

Phe Asn Leu Ser Leu Tyr Trp Ser His Glu Ala Leu Phe Gln Lys Lys  
165 170 175

Thr Leu Gln Ala Leu Glu Phe His Thr Val Pro Phe Gln Leu Leu Ala  
180 185 190

Arg Tyr Lys Gly Leu Asn Leu Thr Glu Asp Thr Tyr Lys Pro Arg Ile  
195 200 205

Tyr Thr Ser Pro Thr Trp Ser Ala Phe Val Thr Asp Ser Ser Trp Ser  
210 215 220

Ala Arg Lys Ser Gln Leu Val Tyr Gln Ser Arg Arg Gly Pro Leu Val

867

225                      230                      235                      240  
 Lys Tyr Ser Ser Asp Tyr Phe Gln Ala Pro Ser Asp Tyr Arg Tyr Tyr  
                                  245                      250                      255  
 Pro Tyr Gln Ser Phe Gln Thr Pro Gln His Pro Ser Phe Leu Phe Gln  
                                  260                      265                      270  
 Asp Lys Arg Val Ser Trp Ser Leu Val Tyr Leu Pro Thr Ile Gln Ser  
                                  275                      280                      285  
 Cys Trp Asn Tyr Gly Phe Ser Cys Ser Ser Asp Glu Leu Pro Val Leu  
                                  290                      295                      300  
 Gly Leu Thr Lys Ser Gly Gly Ser Asp Arg Thr Ile Ala Tyr Glu Asn  
 305                                   310                                   315                                   320  
 Lys Ala Leu Met Leu Cys Glu Gly Leu Phe Val Ala Asp Val Thr Asp  
                                  325                                   330                                   335  
 Phe Glu Gly Trp Lys Ala Ala Ile Pro Ser Ala Leu Asp Thr Asn Ser  
                                  340                                   345                                   350  
 Ser Lys Xaa Thr Ser Ser Phe Pro Cys Pro Ala Gly Thr Ser Thr Ala  
                                  355                                   360                                   365  
 Ser Ala Arg Ser Ser Ala Pro Ser Thr  
                                  370                                   375

<210> 916  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 916  
 Arg Val Gln Arg Asp Thr Cys Leu Pro Pro Met Ser Leu Ser Phe His  
   1                                    5                                    10                                    15  
 Leu Pro Ser Arg Arg Met Lys Asn Pro Ser Ile Val Gly Val Leu Cys  
                                  20                                    25                                    30  
 Thr Asp Ser Gln Gly Leu Asn Leu Gly Cys Arg Gly Thr Leu Ser Asp  
                                  35                                    40                                    45  
 Glu His Ala Gly Val Ile Ser Val Leu Ala Gln Gln Ala Ala Lys Leu  
                                  50                                    55                                    60  
 Thr Ser Asp Pro Thr Asp Ile Pro Val Val Cys Leu Glu Ser Asp Asn  
                                  65                                    70                                    75                                    80

BNSDOCID: <WO\_\_\_0055350A1\_I\_>

Leu	Leu	Glu	Thr	Met	His	Leu	Thr	Gly	Ala	Asp	Xaa	Thr	Asn	Thr	Phe
35				40				45							
Tyr	Leu	Leu	Ser	Ser	Phe	Pro	Val	Glu	Leu	Glu	Ser	Pro	Gly	Leu	Xaa
50				55				60							
Glu	Phe	Leu	Ala	Arg	Leu	Met	Glu	Gln	Cys	Ala	Ser	Leu	Glu	Glu	Leu
65				70				75				80			
Arg	Leu	Ala	Phe	Arg	Pro	Xaa	Met	Asp	Pro	Arg	Gln	Leu	Ser	Met	Met
				85				90				95			
Leu	Met	Leu	Ala	Gln	Ser	Asn	Pro	Gln	Leu	Phe	Ala	Leu	Met	Gly	Thr
				100				105				110			
Arg	Ala	Gly	Ile	Ala	Arg	Glu	Leu	Glu	Arg	Val	Glu	Gln	Gln	Ser	Arg
115								120				125			
Leu	Glu	Gln	Leu	Ser	Ala	Ala	Glu	Leu	Gln	Ser	Arg	Asn	Gln	Gly	His
130				135								140			
Trp	Ala	Asp	Trp	Leu	Gln	Ala	Tyr	Arg	Ala	Arg	Leu	Asp	Lys	Asp	Leu
145				150				155				160			
Glu	Gly	Ala	Gly	Asp	Ala	Ala	Ala	Trp	Gln	Ala	Xaa	Ala	Arg	Ala	Arg
				165				170				175			
Asp	Ala	Arg	Gln	Gln	Pro	Glu	Val	Arg	Ala	Glu	Glu	Leu	His	Ser	Arg
180								185				190			
Arg	Met	Pro	Phe	Glu	Val	Ala	Glu	Arg	Gly	Asp	Phe	Ser	Glu	Val	Arg
195				200								205			
Arg	Val	Leu	Lys	Leu	Phe	Glu	Thr	Leu	Tyr	His	Cys	Glu	Ala	Gly	Ala
210				215								220			
Ala	Thr	Arg	Arg	Pro	Arg	Pro	Arg	Glu	Ala	Asp	Gly	Gly	Gly	Arg	Xaa
225				230				235				240			
Gly	Xaa	Phe	Leu	Thr											
245															

<210> 918

<211> 44

<212> PRT

<213> Homo sapiens

<400> 918

Asn Ser Ala Arg Arg Ile Ser Leu Lys Glu Gly Glu Gly Lys Thr Asp

870

1                      5                      10                      15  
 Phe Leu Cys Gly Thr Lys Thr Lys Pro Ser Val Ser Leu Cys Glu Gln  
                     20                      25                      30  
 Arg Cys Lys Lys Glu Glu Thr Gln Phe Thr His Gly  
                     35                      40  
  
 <210> 919  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 919  
 Phe Gly Thr Arg Val Thr Ser Gly Gly Ser Arg Asp Ala Val Pro Gly  
 1                      5                      10                      15  
 Ala Glu Pro Pro Lys Met Ala Val Cys Ile Ala Val Ile Ala Lys Glu  
                     20                      25                      30  
 Asn Tyr Pro Leu Tyr Ile Arg Ser Thr Pro Thr Glu Asn Glu Leu Lys  
                     35                      40                      45  
 Phe His Tyr Met Val His Thr Ser Leu Asp Val Val Asp Glu Lys Ile  
                     50                      55                      60  
 Ser Ala Met Gly Lys Ala Leu Val Asp Gln Arg Glu Leu Tyr Leu Gly  
                     65                      70                      75                      80  
 Leu Leu Tyr Pro Thr Glu Asp Tyr Lys Val Tyr Gly Tyr Val Thr Asn  
                     85                      90                      95  
 Ser Lys Val Lys Phe Val Met Val Val Asp Ser Ser Asn Thr Ala Leu  
                     100                      105                      110  
 Arg Asp Asn Glu Ile Arg Ser Met Phe Arg Lys Leu His Asn Ser Tyr  
                     115                      120                      125  
 Thr Asp Val Met Cys Asn Pro Phe Tyr Asn Pro Gly Asp Arg Ile Gln  
                     130                      135                      140  
 Ser Arg Ala Phe Asp Asn Met Val Thr Ser Met Met Ile Gln Val Cys  
                     145                      150                      155                      160



871

<210> 920  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 920

Leu Ala Phe Phe Leu Thr Ser Glu Gly Glu Lys Lys Val Ala Thr Tyr  
 1 5 10 15  
 Met Phe Glu Lys Pro Leu Lys Ser Thr Gln Ser Lys Asp Phe Met Leu  
 20 25 30  
 Gln Phe Gly His Met Leu Arg Val  
 35 40

<210> 921  
 <211> 372  
 <212> PRT  
 <213> Homo sapiens

<400> 921

Leu Leu Gly Pro Ala Gly Gln Arg Ser His Ala Ala Pro Met Arg Pro  
 1 5 10 15  
 Leu Pro Pro Val Gly Asp Val Arg Leu Glu Leu Ser Pro Pro Pro Pro  
 20 25 30  
 Leu Leu Pro Val Pro Val Val Ser Gly Ser Pro Val Gly Ser Ser Gly  
 35 40 45  
 Arg Leu Met Ala Ser Ser Ser Ser Leu Val Pro Asp Arg Leu Arg Leu  
 50 55 60  
 Pro Leu Cys Phe Leu Gly Val Phe Val Cys Tyr Phe Tyr Tyr Gly Ile  
 65 70 75 80  
 Leu Gln Glu Lys Ile Thr Arg Gly Lys Tyr Gly Glu Gly Ala Lys Gln  
 85 90 95  
 Glu Thr Phe Thr Phe Ala Leu Thr Leu Val Phe Ile Gln Cys Val Ile  
 100 105 110  
 Asn Ala Val Phe Ala Lys Ile Leu Ile Gln Phe Phe Asp Thr Ala Arg  
 115 120 125  
 Val Asp Arg Thr Arg Ser Trp Leu Tyr Ala Ala Cys Ser Ile Ser Tyr  
 130 135 140  
 Leu Gly Ala Met Val Ser Ser Asn Ser Ala Leu Gln Phe Val Asn Tyr

872

145                      150                      155                      160  
 Pro Thr Gln Val Leu Gly Lys Ser Cys Lys Pro Ile Pro Val Met Leu  
                                  165                      170                      175  
 Leu Gly Val Thr Leu Leu Lys Lys Lys Tyr Pro Leu Ala Lys Tyr Leu  
                                  180                      185                      190  
 Cys Val Leu Leu Ile Val Ala Gly Val Ala Leu Phe Met Tyr Lys Pro  
                                  195                      200                      205  
 Lys Lys Val Val Gly Ile Glu Glu His Thr Val Gly Tyr Gly Glu Leu  
                                  210                      215                      220  
 Leu Leu Leu Leu Ser Leu Thr Leu Asp Gly Leu Thr Gly Val Ser Gln  
                                  225                      230                      235                      240  
 Asp His Met Arg Ala His Tyr Gln Thr Gly Ser Asn His Met Met Leu  
                                  245                      250                      255  
 Asn Ile Asn Leu Trp Ser Thr Leu Leu Leu Gly Met Gly Ile Leu Phe  
                                  260                      265                      270  
 Thr Gly Glu Leu Trp Glu Phe Leu Ser Phe Ala Glu Arg Tyr Pro Ala  
                                  275                      280                      285  
 Ile Ile Tyr Asn Ile Leu Leu Phe Gly Leu Thr Ser Ala Leu Gly Gln  
                                  290                      295                      300  
 Ser Phe Ile Phe Met Thr Val Val Tyr Phe Gly Pro Leu Thr Cys Ser  
                                  305                      310                      315                      320  
 Ile Ile Thr Thr Thr Arg Lys Phe Phe Thr Ile Leu Ala Ser Val Ile  
                                  325                      330                      335  
 Leu Phe Ala Asn Pro Ile Ser Pro Met Gln Trp Val Gly Thr Val Leu  
                                  340                      345                      350  
 Val Phe Leu Gly Leu Gly Leu Asp Ala Lys Phe Gly Lys Gly Ala Lys  
                                  355                      360                      365  
 Lys Thr Ser His  
                                  370

&lt;210&gt; 922

&lt;211&gt; 363

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

873

&lt;400&gt; 922

Pro Ala Arg Thr Met Phe Tyr Ala His Phe Val Leu Ser Lys Arg Gly  
 1 5 10 15  
 Pro Leu Ala Lys Ile Trp Leu Ala Ala His Trp Asp Lys Lys Leu Thr  
 20 25 30  
 Lys Ala His Val Phe Glu Cys Asn Leu Glu Ser Ser Val Glu Ser Ile  
 35 40 45  
 Ile Ser Pro Lys Val Lys Met Ala Leu Arg Thr Ser Gly His Leu Leu  
 50 55 60  
 Leu Gly Val Val Arg Ile Tyr His Arg Lys Ala Lys Tyr Leu Leu Ala  
 65 70 75 80  
 Asp Cys Asn Glu Ala Phe Ile Lys Ile Lys Met Ala Phe Arg Pro Gly  
 85 90 95  
 Val Val Asp Leu Pro Glu Glu Asn Arg Glu Ala Ala Tyr Asn Ala Ile  
 100 105 110  
 Thr Leu Pro Glu Glu Phe His Asp Phe Asp Gln Pro Leu Pro Asp Leu  
 115 120 125  
 Asp Asp Ile Asp Val Ala Gln Gln Phe Ser Leu Asn Gln Ser Arg Val  
 130 135 140  
 Glu Glu Ile Thr Met Arg Glu Glu Val Gly Asn Ile Ser Ile Leu Gln  
 145 150 155 160  
 Glu Asn Asp Phe Gly Asp Phe Gly Met Asp Asp Arg Glu Ile Met Arg  
 165 170 175  
 Glu Gly Ser Ala Phe Glu Asp Asp Asp Met Leu Val Ser Thr Thr Thr  
 180 185 190  
 Ser Asn Leu Leu Leu Glu Ser Glu Gln Ser Thr Ser Asn Leu Asn Glu  
 195 200 205  
 Lys Ile Asn His Leu Glu Tyr Glu Asp Gln Tyr Lys Asp Asp Asn Phe  
 210 215 220  
 Gly Glu Gly Asn Asp Gly Gly Ile Leu Asp Asp Lys Leu Ile Ser Asn  
 225 230 235 240  
 Asn Asp Gly Gly Ile Phe Asp Asp Pro Pro Ala Leu Ser Glu Ala Gly  
 245 250 255  
 Val Met Leu Pro Glu Gln Pro Ala His Asp Asp Met Asp Glu Asp Asp  
 260 265 270

874

Asn Val Ser Met Gly Gly Pro Asp Ser Pro Asp Ser Val Asp Pro Val  
 275 280 285

Glu Pro Met Pro Thr Met Thr Asp Gln Thr Thr Leu Val Pro Asn Glu  
 290 295 300

Glu Glu Ala Phe Ala Leu Glu Pro Ile Asp Ile Thr Val Lys Glu Thr  
 305 310 315 320

Lys Ala Lys Arg Lys Arg Lys Leu Ile Val Asp Ser Val Lys Glu Leu  
 325 330 335

Asp Ser Lys Thr Ile Arg Ala Gln Leu Ser Asp Tyr Ser Asp Ile Val  
 340 345 350

Thr Thr Leu Asp Leu Ala Pro Pro Pro Arg Asn Ile Val Glu Thr  
 355 360

<210> 923  
 <211> 296  
 <212> PRT  
 <213> Homo sapiens  
 <400> 923

Val Ala Val Ile Trp Ala Tyr Trp Leu Gly Leu Lys Val Arg Arg Glu  
 1 5 10 15

Tyr Arg Lys Phe Phe Arg Ala Asn Ala Gly Lys Lys Ile Tyr Glu Phe  
 20 25 30

Thr Leu Gln Arg Ile Val Gln Lys Tyr Phe Leu Glu Met Lys Asn Lys  
 35 40 45

Met Pro Ser Leu Ser Pro Ile Asp Lys Asn Trp Pro Ser Arg Pro Tyr  
 50 55 60

Leu Phe Leu Asp Ser Thr His Lys Glu Leu Lys Arg Ile Phe His Leu  
 65 70 75 80

Trp Arg Cys Lys Lys Tyr Arg Asp Gln Phe Thr Asp Gln Gln Lys Leu  
 85 90 95

Ile Tyr Glu Glu Lys Leu Glu Ala Ser Glu Leu Phe Lys Asp Lys Lys  
 100 105 110

Ala Leu Tyr Pro Ser Ser Val Gly Gln Pro Phe Gln Gly Ala Tyr Leu  
 115 120 125

875

Glu Ile Asn Lys Asn Pro Lys Tyr Lys Lys Leu Lys Asp Ala Ile Glu  
130 135 140

Glu Lys Ile Ile Ile Ala Glu Val Val Asn Lys Ile Asn Arg Ala Asn  
145 150 155 160

Gly Lys Ser Thr Ser Arg Ile Phe Leu Leu Thr Asn Asn Asn Leu Leu  
165 170 175

Leu Ala Asp Gln Lys Ser Gly Gln Ile Lys Ser Gly Val Pro Leu Val  
180 185 190

Asp Val Thr Lys Val Ser Met Ser Ser Gln Asn Asp Gly Phe Phe Ala  
195 200 205

Val His Leu Lys Glu Gly Ser Glu Ala Ala Ser Lys Gly Asp Phe Leu  
210 215 220

Phe Ser Ser Asp His Leu Ile Glu Met Ala Thr Lys Leu Tyr Arg Thr  
225 230 235 240

Thr Leu Ser Gln Thr Lys Gln Lys Leu Asn Ile Glu Ile Ser Asp Glu  
245 250 255

Phe Leu Val Gln Phe Arg Gln Asp Lys Val Cys Val Lys Phe Ile Gln  
260 265 270

Gly Asn Gln Lys Asn Gly Ser Val Pro Thr Cys Lys Arg Lys Asn Asn  
275 280 285

Arg Leu Leu Glu Val Ala Val Pro  
290 295

<210> 924

<211> 91

<212> PRT

<213> Homo sapiens

<400> 924

His Phe Ser Ile Asn Tyr Asn Gln Lys Ser Asp Leu Leu Lys Glu Lys  
1 5 10 15

Ser Asp Cys Lys Ser Phe Gln Gly Gln Thr Ala Thr Glu Pro Pro Thr  
20 25 30

Pro Lys Gln Glu Thr Leu Val Lys Val Gln Glu Ala Arg Arg Phe Ser  
35 40 45

Pro Thr Lys Val Gln Leu Gly Asn Asp Ala Glu Arg Met Thr Thr Thr

876

50                      55                      60  
 Cys Asn Ser Arg Lys Met Leu Ala Ser Arg Val Arg Val Thr Ser Glu  
 65                      70                      75                      80  
 Cys His Lys Ser Ser Leu Ser His Cys Leu Ile  
 85                      90  
  
 <210> 925  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 925  
 Asn Ser Ala Arg Ala Gly Gly Arg Ala Val Leu Ser Gly Glu Pro Glu  
 1                      5                      10                      15  
 Ala Asn Met Asp Gln Glu Thr Val Gly Asn Val Val Leu Leu Ala Ile  
 20                      25                      30  
 Val Thr Leu Ile Ser Val Val Gln Asn Gly Phe Phe Ala His Lys Val  
 35                      40                      45  
 Glu His Glu Ser Arg Thr Gln Asn Gly Arg Ser Phe Gln Arg Thr Gly  
 50                      55                      60  
 Thr Leu Ala Phe Glu Arg Val Tyr Thr Ala Asn Gln Asn Cys Val Asp  
 65                      70                      75                      80  
 Ala Tyr Pro Thr Phe Leu Ala Val Leu Trp Ser Ala Gly Leu Leu Cys  
 85                      90                      95  
 Ser Gln Val Pro Ala Ala Phe Ala Gly Leu Met Tyr Leu Phe Val Arg  
 100                      105                      110  
 Gln Lys Tyr Phe Val Gly Tyr Leu Gly Glu Arg Thr Gln Ser Thr Pro  
 115                      120                      125  
 Gly Tyr Ile Phe Gly Glu Thr His His Thr Leu Pro Val Pro His Val  
 130                      135                      140  
 Arg Cys Trp His Ile Gln Leu Leu Pro His Leu Leu Phe Arg Lys  
 145                      150                      155

<210> 926  
 <211> 303  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 926

Gly Ser Leu Ala Ser Pro Pro Ser Leu Gly Ser Met Gly Glu Lys Ser  
 1 5 10 15

Glu Asn Cys Gly Val Pro Glu Asp Leu Leu Asn Gly Leu Lys Val Thr  
 20 25 30

Asp Thr Gln Glu Ala Glu Cys Ala Gly Pro Pro Val Pro Asp Pro Lys  
 35 40 45

Asn Gln His Ser Gln Ser Lys Leu Leu Arg Asp Asp Glu Ala His Leu  
 50 55 60

Gln Glu Asp Gln Gly Glu Glu Glu Cys Phe His Asp Cys Ser Ala Ser  
 65 70 75 80

Phe Glu Glu Glu Pro Gly Ala Asp Lys Val Glu Asn Lys Ser Asn Glu  
 85 90 95

Asp Val Asn Ser Ser Glu Leu Asp Glu Glu Tyr Leu Ile Glu Leu Glu  
 100 105 110

Lys Asn Met Ser Asp Glu Glu Lys Gln Lys Arg Arg Glu Glu Ser Thr  
 115 120 125

Arg Leu Lys Glu Glu Gly Asn Glu Gln Phe Lys Lys Gly Asp Tyr Ile  
 130 135 140

Glu Ala Glu Ser Ser Tyr Ser Arg Ala Leu Glu Met Cys Pro Ser Cys  
 145 150 155 160

Phe Gln Lys Glu Arg Ser Ile Leu Phe Ser Asn Arg Ala Ala Ala Arg  
 165 170 175

Met Lys Gln Asp Lys Lys Glu Met Ala Ile Asn Asp Cys Ser Lys Ala  
 180 185 190

Ile Gln Leu Asn Pro Ser Tyr Ile Arg Ala Ile Leu Arg Arg Ala Glu  
 195 200 205

Leu Tyr Glu Lys Thr Asp Lys Leu Asp Glu Ala Leu Glu Asp Tyr Lys  
 210 215 220

Ser Ile Leu Glu Lys Asp Pro Ser Ile His Gln Ala Arg Glu Ala Cys  
 225 230 235 240

Met Arg Leu Pro Lys Gln Ile Glu Glu Arg Asn Glu Arg Leu Lys Glu  
 245 250 255

Glu Met Leu Gly Lys Leu Lys Asp Leu Gly Asn Leu Val Leu Arg Pro  
 260 265 270  
 Phe Gly Leu Ser Thr Glu Asn Phe Gln Ile Lys Gln Asp Ser Ser Thr  
 275 280 285  
 Gly Ser Tyr Ser Ile Asn Phe Val Gln Asn Pro Asn Asn Asn Arg  
 290 295 300  
 <210> 927  
 <211> 329  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (1)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <400> 927  
 Xaa Gly Gly Cys Cys Ser Gly Pro Gly His Ser Lys Arg Arg Arg Gln  
 1 5 10 15  
 Ala Pro Gly Val Gly Ala Val Gly Gly Gly Ser Pro Glu Arg Glu Glu  
 20 25 30  
 Val Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala  
 35 40 45  
 Arg Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp  
 50 55 60  
 Phe Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met  
 65 70 75 80  
 Lys Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr  
 85 90 95  
 Gly Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr  
 100 105 110  
 Leu Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe  
 115 120 125  
 Thr Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His  
 130 135 140  
 Ile Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val  
 145 150 155 160



879

Tyr Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln  
 165 170 175  
 Asn Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr  
 180 185 190  
 Asn Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly  
 195 200 205  
 Leu Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn  
 210 215 220  
 Ala Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu  
 225 230 235 240  
 Asp Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu  
 245 250 255  
 Glu Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu  
 260 265 270  
 Lys Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser  
 275 280 285  
 Ala Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu  
 290 295 300  
 Trp Thr Ser Arg Ser Pro Arg Gln Glu Phe Gln Pro Arg His Leu Ser  
 305 310 315 320  
 Thr Leu Ser Cys Met Leu Asn Trp Ala  
 325

&lt;210&gt; 928

&lt;211&gt; 436

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (210)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (217)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

880

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (262)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 928

Lys Arg Phe Leu Arg Asn Phe Lys Leu Leu Thr Lys Arg Glu Phe Trp  
 1 5 10 15

Lys Glu Asn Gln Glu His Tyr His Ile Val Gln Lys Phe Leu Ile Leu  
 20 25 30

Gly Asp Ile Asp Gly Leu Met Asp Glu Phe Ser Lys Trp Leu Ser Lys  
 35 40 45

Ser Arg Asn Asn Leu Pro Gly His Leu Leu Arg Phe Met Thr His Leu  
 50 55 60

Ile Leu Phe Phe Arg Thr Leu Gly Leu Gln Thr Lys Glu Glu Val Ser  
 65 70 75 80

Ile Glu Val Leu Lys Thr Tyr Ile Gln Leu Leu Ile Arg Glu Lys His  
 85 90 95

Thr Asn Leu Ile Ala Phe Tyr Thr Cys His Leu Pro Gln Asp Leu Ala  
 100 105 110

Val Ala Gln Tyr Ala Leu Phe Leu Glu Ser Val Thr Glu Phe Glu Gln  
 115 120 125

Arg His His Cys Leu Glu Leu Ala Lys Glu Ala Asp Leu Asp Val Ala  
 130 135 140

Thr Ile Thr Lys Thr Val Val Glu Asn Ile Arg Lys Lys Asp Asn Gly  
 145 150 155 160

Glu Phe Ser His His Asp Leu Ala Pro Ala Leu Asp Thr Gly Thr Thr  
 165 170 175

Glu Glu Asp Arg Leu Lys Ile Asp Val Ile Asp Trp Leu Val Phe Asp  
 180 185 190

Pro Ala Gln Arg Ala Glu Ala Leu Lys Gln Gly Asn Ala Ile Met Arg  
 195 200 205

Lys Xaa Leu Ala Ser Lys Lys His Xaa Ala Ala Lys Glu Val Phe Val  
 210 215 220

Lys Ile Pro Gln Asp Ser Ile Ala Glu Ile Tyr Asn Gln Cys Glu Glu  
 225 230 235 240

881

[illegible]

<210> 929

<211> 161

<212> PRT

<213> Homo sapiens

 $\langle 220 \rangle$ 

**<221> SITE**

**<222> (159)**

<223> Xaa equals any of the naturally occurring L-amino acids

882

&lt;400&gt; 929

Asp Ala Asp Val Gln Phe Leu Ala Ser Val Leu Pro Pro Asp Thr Asp  
 1 5 10 15  
 Pro Ala Phe Phe Glu His Leu Arg Ala Leu Asp Cys Ser Glu Val Thr  
 20 25 30  
 Val Arg Ala Leu Pro Glu Gly Ser Leu Ala Phe Pro Gly Val Pro Leu  
 35 40 45  
 Leu Gln Val Ser Gly Pro Leu Leu Val Val Gln Leu Leu Glu Thr Pro  
 50 55 60  
 Leu Leu Cys Leu Val Ser Tyr Ala Ser Leu Val Ala Thr Asn Ala Ala  
 65 70 75 80  
 Arg Leu Arg Leu Ile Ala Gly Pro Glu Lys Arg Leu Leu Glu Met Gly  
 85 90 95  
 Leu Arg Arg Ala Gln Gly Pro Asp Gly Gly Leu Thr Ala Ser Thr Tyr  
 100 105 110  
 Ser Tyr Leu Gly Gly Phe Asp Ser Ser Ser Asn Val Leu Ala Gly Gln  
 115 120 125  
 Leu Arg Gly Val Pro Val Ala Gly Thr Leu Ala His Ser Phe Val Thr  
 130 135 140  
 Ser Phe Ser Gly Ser Glu Val Pro Leu Thr Arg Cys Trp Gly Xaa Ser  
 145 150 155 160  
 Leu

&lt;210&gt; 930

&lt;211&gt; 741

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

883

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (282)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 930

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Leu Met Lys Ile Glu Ala Asn Xaa Asp His Met Gly Phe His Phe Thr
  1             5             10             15
Thr Gly Xaa Pro Ala Pro Ser Thr Glu Thr Glu Leu Asp Val Leu Leu
          20             25             30
Pro Thr Ala Thr Ser Leu Pro Ile Pro Arg Lys Ser Ala Thr Val Ile
  35             40             45
Pro Glu Ile Glu Gly Ile Lys Ala Glu Ala Lys Ala Leu Asp Asp Met
  50             55             60
Phe Glu Ser Ser Thr Leu Ser Asp Gly Gln Ala Ile Ala Asp Gln Ser
  65             70             75             80
Glu Ile Ile Pro Thr Leu Gly Gln Phe Glu Arg Thr Gln Glu Glu Tyr
          85             90             95
Glu Asp Lys Lys His Ala Gly Pro Ser Phe Gln Pro Glu Phe Ser Ser
          100            105            110
Gly Ala Glu Glu Ala Leu Val Asp His Thr Pro Tyr Leu Ser Ile Ala
          115            120            125
Thr Thr His Leu Met Asp Gln Ser Val Thr Glu Val Pro Asp Val Met
          130            135            140
Glu Gly Ser Asn Pro Pro Tyr Tyr Thr Asp Thr Thr Leu Ala Val Ser
          145            150            155            160
Thr Phe Ala Lys Leu Ser Ser Gln Thr Pro Ser Ser Pro Leu Thr Ile
          165            170            175
Tyr Ser Gly Ser Glu Ala Ser Gly His Thr Glu Ile Pro Gln Pro Ser
          180            185            190
Ala Leu Pro Gly Ile Asp Val Gly Ser Ser Val Met Ser Pro Gln Asp
          195            200            205
Ser Phe Lys Glu Ile His Val Asn Ile Glu Ala Thr Phe Lys Pro Ser
          210            215            220
Ser Glu Glu Tyr Leu His Ile Thr Glu Pro Pro Ser Leu Ser Pro Asp
          225            230            235            240

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884

Thr Lys Leu Glu Pro Ser Glu Asp Asp Gly Lys Pro Glu Leu Leu Glu  
 245 250 255  
 Glu Met Glu Ala Ser Pro Thr Glu Leu Ile Ala Val Glu Gly Thr Glu  
 260 265 270  
 Ile Leu Gln Asp Phe Gln Asn Lys Thr Xaa Gly Gln Val Ser Gly Glu  
 275 280 285  
 Ala Ile Lys Met Phe Pro Thr Ile Lys Thr Pro Glu Ala Gly Thr Val  
 290 295 300  
 Ile Thr Thr Ala Asp Glu Ile Glu Leu Glu Gly Ala Thr Gln Trp Pro  
 305 310 315 320  
 His Ser Thr Ser Ala Ser Ala Thr Tyr Gly Val Glu Ala Gly Val Val  
 325 330 335  
 Pro Trp Leu Ser Pro Gln Thr Ser Glu Arg Pro Thr Leu Ser Ser Ser  
 340 345 350  
 Pro Glu Ile Asn Pro Glu Thr Gln Ala Ala Leu Ile Arg Gly Gln Asp  
 355 360 365  
 Ser Thr Ile Ala Ala Ser Glu Gln Gln Val Ala Ala Arg Ile Leu Asp  
 370 375 380  
 Ser Asn Asp Gln Ala Thr Val Asn Pro Val Glu Phe Asn Thr Glu Val  
 385 390 395 400  
 Ala Thr Pro Pro Phe Ser Leu Leu Glu Thr Ser Asn Glu Thr Asp Phe  
 405 410 415  
 Leu Ile Gly Ile Asn Glu Glu Ser Val Glu Gly Thr Ala Ile Tyr Leu  
 420 425 430  
 Pro Gly Pro Asp Arg Cys Lys Met Asn Pro Cys Leu Asn Gly Gly Thr  
 435 440 445  
 Cys Tyr Pro Thr Glu Thr Ser Tyr Val Cys Thr Cys Val Pro Gly Tyr  
 450 455 460  
 Ser Gly Asp Gln Cys Glu Leu Asp Phe Asp Glu Cys His Ser Asn Pro  
 465 470 475 480  
 Cys Arg Asn Gly Ala Thr Cys Val Asp Gly Phe Asn Thr Phe Arg Cys  
 485 490 495  
 Leu Cys Leu Pro Ser Tyr Val Gly Ala Leu Cys Glu Gln Asp Thr Glu  
 500 505 510

885

Thr Cys Asp Tyr Gly Trp His Lys Phe Gln Gly Gln Cys Tyr Lys Tyr  
 515 520 525  
 Phe Ala His Arg Arg Thr Trp Asp Ala Ala Glu Arg Glu Cys Arg Leu  
 530 535 540  
 Gln Gly Ala His Leu Thr Ser Ile Leu Ser His Glu Glu Gln Met Phe  
 545 550 555 560  
 Val Asn Arg Val Gly His Asp Tyr Gln Trp Ile Gly Leu Asn Asp Lys  
 565 570 575  
 Met Phe Glu His Asp Phe Arg Trp Thr Asp Gly Ser Thr Leu Gln Tyr  
 580 585 590  
 Glu Asn Trp Arg Pro Asn Gln Pro Asp Ser Phe Phe Ser Ala Gly Glu  
 595 600 605  
 Asp Cys Val Val Ile Ile Trp His Glu Asn Gly Gln Trp Asn Asp Val  
 610 615 620  
 Pro Cys Asn Tyr His Leu Thr Tyr Thr Cys Lys Lys Gly Thr Val Ala  
 625 630 635 640  
 Cys Gly Gln Pro Pro Val Val Glu Asn Ala Lys Thr Phe Gly Lys Met  
 645 650 655  
 Lys Pro Arg Tyr Glu Ile Asn Ser Leu Ile Arg Tyr His Cys Lys Asp  
 660 665 670  
 Gly Phe Ile Gln Arg His Leu Pro Thr Ile Arg Cys Leu Gly Asn Gly  
 675 680 685  
 Arg Trp Ala Ile Pro Lys Ile Thr Cys Met Asn Pro Ser Ala Tyr Gln  
 690 695 700  
 Arg Thr Tyr Ser Met Lys Tyr Phe Lys Asn Ser Ser Ser Ala Lys Asp  
 705 710 715 720  
 Asn Ser Ile Asn Thr Ser Lys His Asp His Arg Trp Ser Arg Arg Trp  
 725 730 735  
 Gln Glu Ser Arg Arg  
 740

&lt;210&gt; 931

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

886

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (28)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 931

Gly Lys Ala Gly Asp Gln Leu Val Pro Asp Asn Leu Lys Glu Thr Asp  
 1 5 10 15  
 Lys Glu Lys Gly Asn Val Val Leu Lys Gly Glu Xaa Ser Ala Arg Met  
 20 25 30  
 Lys Ile Pro Ser Asn Met Trp Val Glu Ala Trp Glu Thr Ala Lys Pro  
 35 40 45  
 Ile Pro Ala Arg Arg Gln Arg Arg Leu Phe Asp Asp Thr Arg Glu Ala  
 50 55 60  
 Glu Lys Val Leu His Tyr Leu Ala Ile Gln Lys Pro Ala Asp Leu Ala  
 65 70 75 80  
 Arg His Leu Leu Pro Cys Val Ile His Ala Ala Val Leu Lys Val Lys  
 85 90 95  
 Glu Glu Glu Ser Leu Glu Asn Ile Ser Ser Val Lys Lys Ile Ile Lys  
 100 105 110  
 Gln Ile Ile Ser His Ser Ser Lys Val Leu His Phe Pro Asn Pro Glu  
 115 120 125  
 Asp Lys Lys Leu Glu Glu Ile Ile His Gln Ile Thr Asn Val Glu Ala  
 130 135 140  
 Leu Ile Ala Arg Ala Arg Ser Leu Lys Ala Lys Phe Gly Thr Glu Lys  
 145 150 155 160  
 Cys Glu Gln Glu Glu Lys Glu Asp Leu Glu Arg Phe Val Ser Cys  
 165 170 175  
 Leu Leu Glu Gln Pro Glu Val Leu Val Thr Gly Ala Gly Arg Gly His  
 180 185 190  
 Ala Gly Arg Ile Ile His Lys Leu Phe Val Asn Ala Gln Arg Cys Gln  
 195 200 205  
 Leu



887

<210> 932  
<211> 57  
<212> PRT  
<213> Homo sapiens

<400> 932  
Leu Leu Glu Val Pro Glu Met Gly Leu Thr Phe Ile Lys Gln Ile Ala  
1 5 10 15  
Tyr Tyr Asp Leu Ala Ala Ala Thr Val Gln Leu His Ile Asn Ser Thr  
20 25 30  
Asp Gln Thr Ile Cys Ile Trp His His Leu Leu Thr His Asp Met Arg  
35 40 45  
Leu Phe Cys Ile Asn Cys Tyr Asp Gly  
50 55

<210> 933  
<211> 125  
<212> PRT  
<213> Homo sapiens

<400> 933  
Ile Lys Glu Glu Ser Asp Tyr His Asp Leu Glu Ser Val Val Gln Gln  
1 5 10 15  
Val Glu Gln Asn Leu Glu Leu Met Thr Lys Arg Ala Val Lys Ala Glu  
20 25 30  
Asn His Val Val Lys Leu Lys Gln Glu Ile Ser Leu Leu Gln Ala Gln  
35 40 45  
Val Ser Asn Phe Gln Arg Glu Asn Glu Ala Leu Arg Cys Gly Gln Gly  
50 55 60  
Ala Ser Leu Thr Val Val Lys Gln Asn Ala Asp Val Ala Leu Gln Asn  
65 70 75 80  
Leu Arg Val Val Met Asn Ser Ala Gln Ala Ser Ile Lys Gln Leu Val  
85 90 95  
Ser Gly Ala Glu Thr Leu Asn Leu Val Ala Glu Ile Leu Lys Ser Ile  
100 105 110  
Asp Arg Ile Ser Glu Val Lys Asp Glu Glu Glu Asp Ser  
115 120 125

888

&lt;210&gt; 934

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 934

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Pro Thr Phe Ser Arg Ala Val Ala Thr Met Phe Ser Arg Ala Gly Val
  1              5              10              15

Ala Gly Leu Ser Ala Trp Thr Leu Gln Pro Gln Trp Ile Gln Val Arg
      20              25              30

Asn Met Ala Thr Leu Lys Asp Ile Thr Arg Arg Leu Lys Ser Ile Lys
      35              40              45

Asn Ile Gln Lys Ile Thr Lys Ser Met Lys Met Val Ala Ala Ala Lys
      50              55              60

Tyr Ala Arg Ala Glu Arg Glu Leu Lys Pro Ala Arg Ile Tyr Gly Leu
      65              70              75              80

Gly Ser Leu Ala Leu Tyr Glu Lys Ala Asp Ile Lys Gly Pro Glu Asp
      85              90              95

Lys Lys Lys His Leu Leu Ile Gly Val Ser Ser Asp Arg Gly Leu Cys
      100             105             110

Gly Ala Ile His Ser Ser Ile Ala Lys Gln Met Lys Ser Glu Val Ala
      115             120             125

Thr Leu Thr Ala Ala Gly Lys Glu Val Met Leu Val Gly Ile Gly Asp
      130             135             140

Lys Ile Arg Gly Ile Leu Tyr Arg Thr His Ser Asp Gln Phe Leu Val
      145             150             155             160

Ala Phe Lys Glu Val Gly Arg Lys Pro Pro Thr Phe Gly Asp Ala Ser
      165             170             175

Val Ile Ala Leu Glu Leu Leu Asn Ser Gly Tyr Glu Phe Asp Glu Gly
      180             185             190

Ser Ile Ile Phe Asn Lys Phe Arg Ser Val Ile Ser Tyr Lys Thr Glu
      195             200             205

Glu Lys Pro Ile Phe Ser Leu Asn Thr Val Ala Ser Ala Asp Ser Met
      210             215             220

Ser Ile Tyr Asp Asp Ile Asp Ala Asp Val Leu Gln Asn Tyr Gln Glu
      225             230             235             240

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889

Tyr Asn Leu Ala Asn Ile Ile Tyr Tyr Ser Leu Lys Glu Ser Thr Thr  
 245 250 255

Ser Glu Gln Ser Ala Arg Met Thr Ala Met Asp Asn Ala Ser Lys Asn  
 260 265 270

Ala Ser Glu Met Ile Asp Lys Leu Thr Leu Thr Phe Asn Arg Thr Arg  
 275 280 285

Gln Ala Val Ile Thr Lys Glu Leu Ile Glu Ile Ile Ser Gly Ala Ala  
 290 295 300

Ala Leu  
 305

<210> 935

<211> 135

<212> PRT

<213> Homo sapiens

<400> 935

Gly Ala Leu Cys Ala Ala Ser Val Pro Arg Cys Val Trp Ser Ser Ala  
 1 5 10 15

Gly Val Val Ala Leu Phe Glu Glu His Cys Ala Pro Leu Val Trp Val  
 20 25 30

Tyr Thr Tyr Glu Cys Cys His Tyr Met Cys Ser Ala Leu Leu Ser Leu  
 35 40 45

Ser Cys Pro Cys Pro Ala Pro Ser Glu Arg Ala Ala Gly Leu Cys Cys  
 50 55 60

Arg Leu Val Val Pro Cys His Lys Gly Met Pro Arg Leu Thr Asp Leu  
 65 70 75 80

Ser Val Lys Thr Lys Asp Val Trp Glu Ile Pro Arg Glu Ser Leu Gln  
 85 90 95

Leu Ile Lys Arg Leu Gly Asn Gly Gln Phe Gly Glu Val Trp Met Gly  
 100 105 110

Met Leu Arg Leu Asn Tyr Ser Leu Ile Ser Phe Pro Val Trp Lys Ile  
 115 120 125

Pro Asn Thr Lys Asp Gly Arg  
 130 135

890

&lt;210&gt; 936

&lt;211&gt; 284

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 936

Leu Ser Gly Thr Thr Tyr Ala Arg Ala Cys Arg Ser Gln Cys Ala Ser  
 1 5 10 15  
 Ala Ala Gly Gly Cys Thr Gly Gly Ala Gly Gly Gly Gly Gly Gly Gly  
 20 25 30  
 Gly Gly Trp Gly Gly Ala Gly Gly Lys Cys Cys Asp Ala Val Pro Gly  
 35 40 45  
 Arg Gly Arg Arg Val Glu Ala Glu Tyr Gln Phe Pro Ser Gly Lys Ala  
 50 55 60  
 Ala Met Ala Ile Phe Ser Val Tyr Val Val Asn Lys Ala Gly Gly Leu  
 65 70 75 80  
 Ile Tyr Gln Leu Asp Ser Tyr Ala Pro Arg Ala Glu Ala Glu Lys Thr  
 85 90 95  
 Phe Ser Tyr Pro Leu Asp Leu Leu Leu Lys Leu His Asp Glu Arg Val  
 100 105 110  
 Leu Val Ala Phe Gly Gln Arg Asp Gly Ile Arg Val Gly His Ala Val  
 115 120 125  
 Leu Ala Ile Asn Gly Met Asp Val Asn Gly Arg Tyr Thr Ala Asp Gly  
 130 135 140  
 Lys Glu Val Leu Glu Tyr Leu Gly Asn Pro Ala Asn Tyr Pro Val Ser  
 145 150 155 160  
 Ile Arg Phe Gly Arg Pro Arg Leu Thr Ser Asn Glu Lys Leu Met Leu  
 165 170 175  
 Ala Ser Met Phe His Ser Leu Phe Ala Ile Gly Ser Gln Leu Ser Pro  
 180 185 190  
 Glu Gln Gly Ser Ser Gly Ile Glu Met Leu Glu Thr Asp Thr Phe Lys  
 195 200 205  
 Leu His Cys Tyr Gln Thr Leu Thr Gly Ile Lys Phe Val Val Leu Ala  
 210 215 220  
 Asp Pro Arg Gln Ala Gly Ile Asp Ser Leu Leu Arg Lys Ile Tyr Glu

225                      230                      235                      240

Ile Tyr Ser Asp Phe Ala Leu Lys Asn Pro Phe Tyr Ser Leu Glu Met  
                        245                      250                      255

Pro Ile Arg Cys Glu Leu Phe Asp Gln Asn Leu Lys Leu Ala Leu Glu  
                        260                      265                      270

Val Ala Glu Lys Ala Gly Thr Phe Gly Pro Gly Ser  
                        275                      280

<210> 937  
<211> 338  
<212> PRT  
<213> Homo sapiens

<400> 937

Pro Val Ser Pro Leu His Arg Glu Glu Gly Asp Lys Trp Gly Glu Val  
1                      5                      10                      15

Trp Cys Gln Met Gly Trp Arg Arg Lys Arg Val Pro Gln Arg Gly Arg  
                        20                      25                      30

Lys Ala Pro Pro Pro Gln Leu His Gly Asn Ile Asn Asn Leu Tyr Phe  
                        35                      40                      45

Pro Ile Arg Trp Arg Asp Arg Leu His Trp Asp Ser Pro Asn Pro Ala  
                        50                      55                      60

Ala Glu Cys Gln Arg Pro Arg Ser Thr Leu Val Ser Arg Lys Pro Gly  
65                      70                      75                      80

Pro Gly Arg Ile Thr Trp Asp Glu Leu Ala Ala Ser Gly Leu Pro Ser  
                        85                      90                      95

Cys Asp Ala Ala Val Asn Leu Ala Gly Glu Asn Ile Leu Asn Pro Leu  
                        100                      105                      110

Arg Arg Trp Asn Glu Thr Phe Gln Lys Glu Val Leu Gly Ser Arg Leu  
                        115                      120                      125

Glu Thr Thr Gln Leu Leu Ala Lys Ala Ile Thr Lys Ala Pro Gln Pro  
130                      135                      140

Pro Lys Ala Trp Val Leu Val Thr Gly Val Ala Tyr Tyr Gln Pro Ser  
145                      150                      155                      160

Leu Thr Ala Glu Tyr Asp Glu Asp Ser Pro Gly Gly Asp Phe Asp Phe  
                        165                      170                      175

892

Phe Ser Asn Leu Val Thr Lys Trp Glu Ala Ala Ala Arg Leu Pro Gly  
                   180                                  185                                  190  
 Asp Ser Thr Arg Gln Val Val Val Arg Ser Gly Val Val Leu Gly Arg  
                   195                                  200                                  205  
 Gly Gly Gly Ala Met Gly His Met Leu Leu Pro Phe Arg Leu Gly Leu  
                   210                                  215                                  220  
 Gly Gly Pro Ile Gly Ser Gly His Gln Phe Phe Pro Trp Ile His Ile  
                   225                                  230                                  235                                  240  
 Gly Asp Leu Ala Gly Ile Leu Thr His Ala Leu Glu Ala Asn His Val  
                                   245                                  250                                  255  
 His Gly Val Leu Asn Gly Val Ala Pro Ser Ser Ala Thr Asn Ala Glu  
                                   260                                  265                                  270  
 Phe Ala Gln Thr Phe Gly Ala Ala Leu Gly Arg Arg Ala Phe Ile Pro  
                   275                                  280                                  285  
 Leu Pro Ser Ala Val Val Gln Ala Val Phe Gly Arg Gln Arg Ala Ile  
                   290                                  295                                  300  
 Met Leu Leu Glu Gly Gln Lys Val Ile Pro Arg Arg Thr Leu Ala Thr  
                   305                                  310                                  315                                  320  
 Gly Tyr Gln Tyr Ser Phe Pro Glu Leu Gly Ala Ala Leu Lys Glu Ile  
                                   325                                  330                                  335  
 Val Ala

&lt;210&gt; 938

&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (31)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (164)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (220)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (221)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (238)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (263)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (267)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (268)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 938

Cys	Gln	Glu	Trp	Val	Pro	Asp	Arg	Glu	Ser	Tyr	Val	Ser	His	Met	Lys
1				5				10						15	

Lys	Ser	His	Gly	Arg	Thr	Leu	Lys	Arg	Tyr	Pro	Cys	Arg	Gln	Xaa	Glu
		20					25						30		

Gln	Ser	Phe	His	Thr	Pro	Asn	Ser	Leu	Arg	Lys	His	Ile	Arg	Asn	Asn
		35					40					45			

His	Asp	Thr	Val	Lys	Lys	Phe	Tyr	Thr	Cys	Gly	Tyr	Cys	Thr	Glu	Asp
	50					55					60				

Ser	Pro	Ser	Phe	Pro	Arg	Pro	Ser	Leu	Leu	Glu	Ser	His	Ile	Ser	Leu
65					70					75				80	

Met	His	Gly	Ile	Arg	Asn	Pro	Asp	Leu	Ser	Gln	Thr	Ser	Lys	Val	Lys
			85					90						95	

Pro	Pro	Gly	Gly	His	Ser	Pro	Gln	Val	Asn	His	Leu	Lys	Arg	Pro	Val
		100					105						110		

894

Ser Gly Val Gly Asp Ala Pro Gly Thr Ser Asn Gly Ala Thr Val Ser  
115 120 125

Ser Thr Lys Arg His Lys Ser Leu Phe Gln Cys Ala Lys Cys Ser Phe  
130 135 140

Ala Thr Asp Ser Gly Leu Glu Phe Gln Ser His Ile Pro Gln His Gln  
145 150 155 160

Val Gly Gln Xaa His Ser Pro Met Ser Pro Leu Trp Phe Val Leu His  
165 170 175

Leu Cys Gln Leu Pro Gln Pro Pro Pro Leu His Cys Pro Gln Gly Glu  
180 185 190

Arg Pro Gly Gly Gly Gly Gly Arg Gly Gly Gly Gly Thr Glu Met Ala  
195 200 205

Val Glu Val Ala Glu Gln Arg Arg Ala Pro Gly Xaa Xaa Cys Pro Trp  
210 215 220

Arg Leu Glu Arg Met Asp Trp Lys Asn Val Pro Val Ser Xaa Cys Gln  
225 230 235 240

Leu Thr Gln Arg Arg Gly Asp Cys Trp Ala Arg Pro Leu Arg Thr Met  
245 250 255

Val Ala Thr Met Ile Thr Xaa Asn His Arg Xaa Xaa Arg Thr Arg Thr  
260 265 270

Ala Thr His Cys Pro Leu Arg Cys Asp Arg Arg Leu Cys Ser Val His  
275 280 285

Gly Gln Gly Trp Cys Arg Ser Val Phe His Leu Pro Cys Gly Pro Trp  
290 295 300

Lys Ile Lys Gly Ser Ala Pro Ser Val Ser Val Thr Gly Cys Thr Leu  
305 310 315 320

Glu

&lt;210&gt; 939

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;



<221> SITE  
 <222> (4)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (44)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (67)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (71)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (81)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (103)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 939  
 Ala Ala Ser Xaa Gly Glu Gln Arg Glu Arg Ala Arg Leu Gln Thr Pro  
           1                  5                  10                  15  
 Thr Arg Pro His Ser Thr Ser Ala Arg Pro Arg Arg Arg Gln Val Gln  
                   20                  25                  30  
 Leu Leu Gln Leu Cys Gly Cys Ala Ala Lys Gly Xaa Ala His Gly Leu  
           35                  40                  45  
 Asp Val Thr Ser Pro Thr Val Ser Trp Leu Ala Cys Pro Cys Ala Arg  
           50                  55                  60  
 Pro Ser Xaa Ser Arg Gln Xaa Leu Gly Thr Ser Glu Glu Glu Pro Gly  
           65                  70                  75                  80  
 Xaa Asn Gly Lys Gly Gly Ile Gly Val His His Ser Leu Leu Leu Trp  
                   85                  90                  95  
 Ser Ser Thr Gly Gly Thr Xaa Met Glu Val Ser Cys Leu Thr Ser Leu  
           100                  105                  110

896

His Cys Thr Gly Pro Gly Met Pro Ile His Pro Leu Ala Glu Asp Thr  
115 120 125

His Gln Val Ile Cys Glu Glu Thr Leu Gly Ser His His Leu Lys Ala  
130 135 140

Arg Gly Ser Pro Ser His Arg  
145 150

&lt;210&gt; 940

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (103)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 940

Arg Cys Gly Trp Ser Ser Arg Ser Arg Arg Ser Arg Cys Ala Arg Arg  
1 5 10 15

Cys Pro Pro Ser Pro Cys Pro Thr Pro Arg His Val Pro Ser Ser Arg  
20 25 30

His Pro Glu Val Cys Gly Leu Arg Thr Asn Ser His Arg Cys Leu Phe  
35 40 45

Arg Pro Gln Leu Gln Ala Met Pro Ala Ala Gly Gly Val Leu Tyr Gln  
50 55 60

Pro Ser Gly Pro Ala Ser Phe Pro Ser Thr Phe Ser Pro Ala Gly Ser  
65 70 75 80

Val Glu Gly Ser Pro Met His Gly Val Tyr Met Ser Gln Pro Val Pro  
85 90 95

Ala Ala Gly Pro Tyr Pro Xaa  
100

&lt;210&gt; 941

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

897

&lt;221&gt; SITE

&lt;222&gt; (123)

&lt;223&gt; xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 941

Thr Ala Gly Arg Ser Asp Val Leu Pro Val Ala Gly Gly Glu Val Arg  
 1 5 10 15

Ala Leu Gln Glu Gly Gly Cys Gly Asp Lys Met Lys Ile Phe Val Gly  
 20 25 30

Asn Val Asp Gly Ala Asp Thr Thr Pro Glu Glu Leu Ala Ala Leu Phe  
 35 40 45

Ala Pro Tyr Gly Thr Val Met Ser Cys Ala Val Met Lys Gln Phe Ala  
 50 55 60

Phe Val His Met Arg Glu Asn Ala Gly Ala Leu Arg Ala Ile Glu Ala  
 65 70 75 80

Leu His Gly His Glu Leu Arg Pro Gly Arg Ala Leu Val Val Glu Met  
 85 90 95

Ser Arg Pro Arg Pro Leu Asn Thr Trp Lys Ile Phe Val Gly Asn Val  
 100 105 110

Ser Ala Ala Cys Thr Ser Gln Glu Leu Arg Xaa Ser Ser Ser Ala Ala  
 115 120 125

Asp Ala Ser Ser Ser Val Thr Trp  
 130 135

&lt;210&gt; 942

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 942

Ile Met Lys Glu Ser Ser Ser Val Leu Ala Lys Cys Ser Ser Ile Ala  
 1 5 10 15

Gly Tyr Ile Gln Trp Ser Ser Ile Asn Ser Tyr Leu Ser Gly Leu Asn  
 20 25 30

Gln Asn Cys Val Ser Leu Asn Ser Tyr His Thr Glu Gly Ala Ser Gln  
 35 40 45

Ile Thr Ile Phe Leu Ser Ala Val Phe Leu Gln Lys Ser  
 50 55 60

<210> 943  
 <211> 580  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (52)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (73)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 943  
 Gly Ala Gln Ala Gln Ala Ser Ala Arg Pro Leu Gln Ala Phe Gly Ala  
     1                    5                    10                    15  
 Arg Ala Arg Leu Gly Tyr Gly Pro Gly Arg Arg Arg Pro Pro Ser Ala  
             20                    25                    30  
 Arg Cys Leu Ser Gly Thr Ala Asn Arg Arg Glu Arg Arg Arg Val Gly  
             35                    40                    45  
 Leu Ser Ala Xaa Leu Gly Ala Gly Ala His Ala Arg Ala Pro Pro Gln  
     50                    55                    60  
 Ala Gly Ala Met Ala Ser Gly Ser Xaa Ala Glu Cys Leu Gln Gln Glu  
     65                    70                    75                    80  
 Thr Thr Cys Pro Val Cys Leu Gln Tyr Phe Ala Glu Pro Met Met Leu  
             85                    90                    95  
 Asp Cys Gly His Asn Ile Cys Cys Ala Cys Leu Ala Arg Cys Trp Gly  
             100                    105                    110  
 Thr Ala Glu Thr Asn Val Ser Cys Pro Gln Cys Arg Glu Thr Phe Pro  
     115                    120                    125  
 Gln Arg His Met Arg Pro Asn Arg His Leu Ala Asn Val Thr Gln Leu  
     130                    135                    140  
 Val Lys Gln Leu Arg Thr Glu Arg Pro Ser Gly Pro Gly Gly Glu Met  
     145                    150                    155                    160  
 Gly Val Cys Glu Lys His Arg Glu Pro Leu Lys Leu Tyr Cys Glu Glu  
             165                    170                    175

Asp Gln Met Pro Ile Cys Val Val Cys Asp Arg Ser Arg Glu His Arg  
180 185 190

Gly His Ser Val Leu Pro Leu Glu Glu Ala Val Glu Gly Phe Lys Glu  
195 200 205

Gln Ile Gln Asn Gln Leu Asp His Leu Lys Arg Val Lys Asp Leu Lys  
210 215 220

Lys Arg Arg Arg Ala Gln Gly Glu Gln Ala Arg Ala Glu Leu Leu Ser  
225 230 235 240

Leu Thr Gln Met Glu Arg Glu Lys Ile Val Trp Glu Phe Glu Gln Leu  
245 250 255

Tyr His Ser Leu Lys Glu His Glu Tyr Arg Leu Leu Ala Arg Leu Glu  
260 265 270

Glu Leu Asp Leu Ala Ile Tyr Asn Ser Ile Asn Gly Ala Ile Thr Gln  
275 280 285

Phe Ser Cys Asn Ile Ser His Leu Ser Ser Leu Ile Ala Gln Leu Glu  
290 295 300

Glu Lys Gln Gln Gln Pro Thr Arg Glu Leu Leu Gln Asp Ile Gly Asp  
305 310 315 320

Thr Leu Ser Arg Ala Glu Arg Ile Arg Ile Pro Glu Pro Trp Ile Thr  
325 330 335

Pro Pro Asp Leu Gln Glu Lys Ile His Ile Phe Ala Gln Lys Cys Leu  
340 345 350

Phe Leu Thr Glu Ser Leu Lys Gln Phe Thr Glu Lys Met Gln Ser Asp  
355 360 365

Met Glu Lys Ile Gln Glu Leu Arg Glu Ala Gln Leu Tyr Ser Val Asp  
370 375 380

Val Thr Leu Asp Pro Asp Thr Ala Tyr Pro Ser Leu Ile Leu Ser Asp  
385 390 395 400

Asn Leu Arg Gln Val Arg Tyr Ser Tyr Leu Gln Gln Asp Leu Pro Asp  
405 410 415

Asn Pro Glu Arg Phe Asn Leu Phe Pro Cys Val Leu Gly Ser Pro Cys  
420 425 430

Phe Ile Ala Gly Arg His Tyr Trp Glu Val Glu Val Gly Asp Lys Ala  
435 440 445

900

Lys Trp Thr Ile Gly Val Cys Glu Asp Ser Val Cys Arg Lys Gly Gly  
450 455 460

Val Thr Ser Ala Pro Gln Asn Gly Phe Trp Ala Val Ser Leu Trp Tyr  
465 470 475 480

Gly Lys Glu Tyr Trp Ala Leu Thr Ser Pro Met Thr Ala Leu Pro Leu  
485 490 495

Arg Thr Pro Leu Gln Arg Val Gly Ile Phe Leu Asp Tyr Asp Ala Gly  
500 505 510

Glu Val Ser Phe Tyr Asn Val Thr Glu Arg Cys His Thr Phe Thr Phe  
515 520 525

Ser His Ala Thr Phe Cys Gly Pro Val Arg Pro Tyr Phe Ser Leu Ser  
530 535 540

Tyr Ser Gly Gly Lys Ser Ala Ala Pro Leu Ile Ile Cys Pro Met Ser  
545 550 555 560

Gly Ile Asp Gly Phe Ser Gly His Val Gly Asn His Gly His Ser Met  
565 570 575

Glu Thr Ser Pro  
580

<210> 944

<211> 437

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (166)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (317)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 944

901

Ser Ala Thr Gly Ser Gly Glu Lys Glu Cys Gly Val Thr Ala Thr Phe  
 1 5 10 15  
 Asp Ala Ser Arg Thr Thr Phe Thr Arg Glu Gly Ser Phe Arg Val Thr  
 20 25 30  
 Thr Ala Thr Glu Gln Ala Glu Arg Glu Glu Ile Met Lys Gln Met Gln  
 35 40 45  
 Asp Ala Lys Lys Ala Glu Thr Asp Lys Ile Val Val Gly Ser Ser Val  
 50 55 60  
 Ala Pro Gly Xaa Thr Ala Pro Ser Pro Ser Ser Pro Thr Ser Pro Thr  
 65 70 75 80  
 Ser Asp Ala Thr Thr Ser Leu Glu Met Asn Asn Pro His Ala Ile Pro  
 85 90 95  
 Arg Arg His Ala Pro Ile Glu Gln Leu Ala Arg Gln Gly Ser Phe Arg  
 100 105 110  
 Gly Phe Pro Ala Leu Ser Gln Lys Met Ser Pro Phe Lys Arg Gln Leu  
 115 120 125  
 Ser Leu Arg Ile Asn Glu Leu Pro Ser Thr Met Gln Arg Lys Thr Asp  
 130 135 140  
 Phe Pro Ile Lys Asn Ala Val Pro Glu Val Glu Gly Glu Ala Glu Ser  
 145 150 155 160  
 Ile Ser Ser Leu Cys Xaa Gln Ile Thr Asn Ala Phe Ser Thr Pro Glu  
 165 170 175  
 Asp Pro Phe Ser Ser Ala Pro Met Thr Lys Pro Val Thr Val Val Ala  
 180 185 190  
 Pro Gln Ser Pro Thr Phe Gln Gly Thr Glu Trp Gly Gln Ser Ser Gly  
 195 200 205  
 Ala Ala Ser Pro Gly Leu Phe Gln Ala Gly His Arg Arg Thr Pro Ser  
 210 215 220  
 Glu Ala Asp Arg Trp Leu Glu Glu Val Ser Lys Ser Val Arg Ala Gln  
 225 230 235 240  
 Gln Pro Gln Ala Ser Ala Ala Pro Leu Gln Pro Val Leu Gln Pro Pro  
 245 250 255  
 Pro Pro Thr Ala Ile Ser Gln Pro Ala Ser Pro Phe Gln Gly Asn Ala  
 260 265 270

Phe Leu Thr Ser Gln Pro Val Pro Val Gly Val Val Pro Ala Leu Gln  
 275 280 285  
 Pro Ala Phe Val Pro Ala Gln Ser Tyr Pro Val Ala Asn Gly Met Pro  
 290 295 300  
 Tyr Pro Ala Pro Asn Val Pro Val Val Gly Ile Thr Xaa Ser Gln Met  
 305 310 315 320  
 Val Ala Asn Val Phe Gly Thr Ala Gly His Pro Gln Ala Ala His Pro  
 325 330 335  
 His Gln Ser Pro Ser Leu Val Arg Gln Gln Thr Phe Pro His Tyr Glu  
 340 345 350  
 Ala Ser Ser Ala Thr Thr Ser Pro Phe Phe Lys Pro Pro Ala Gln His  
 355 360 365  
 Leu Asn Gly Ser Ala Ala Phe Asn Gly Val Asp Asp Gly Arg Leu Ala  
 370 375 380  
 Ser Ala Asp Arg His Thr Glu Val Pro Thr Gly Thr Cys Pro Val Asp  
 385 390 395 400  
 Pro Phe Glu Ala Gln Trp Ala Ala Leu Glu Asn Lys Ser Lys Gln Arg  
 405 410 415  
 Thr Asn Pro Ser Pro Thr Asn Pro Phe Ser Ser Asp Leu Gln Lys Thr  
 420 425 430  
 Phe Glu Ile Glu Leu  
 435

&lt;210&gt; 945

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (119)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 945

His Gly Ser Met Arg Arg Leu Leu Ile Pro Leu Ala Leu Trp Leu Gly  
 1 5 10 15

Ala Val Gly Val Gly Val Ala Glu Leu Thr Glu Ala Gln Arg Arg Gly  
 20 25 30



903

Leu Gln Val Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Trp  
           35                          40                          45  
 Ala Phe Gln Glu Thr Ser Val Glu Ser Ala Val Asp Thr Pro Phe Pro  
           50                          55                          60  
 Ala Gly Ile Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Ser Cys  
           65                          70                          75                          80  
 Arg Lys Arg Asp Trp Lys Lys Pro Glu Cys Lys Val Arg Pro Asn Gly  
                           85                          90                          95  
 Arg Lys Arg Lys Cys Leu Ala Cys Ile Lys Leu Gly Ser Glu Asp Lys  
                           100                          105                          110  
 Val Leu Gly Arg Leu Val Xaa Cys Pro Ile Glu Thr Gln Val Leu Arg  
           115                          120                          125  
 Glu Thr Gln Cys Leu Arg Val Gln Arg Ala Gly Glu Asp Pro His Ser  
           130                          135                          140  
 Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser Lys Ala Leu Pro Arg Ser  
           145                          150                          155                          160

&lt;210&gt; 946

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (198)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 946

Gly Gly Asp Pro Pro Gly Asp Leu Ser Ser Leu Ser Ser Lys Leu Leu  
   1                          5                          10                          15  
 Pro Gly Phe Thr Thr Leu Gly Phe Lys Asp Glu Arg Arg Asn Lys Val  
           20                          25                          30  
 Thr Phe Leu Ser Ser Ala Thr Thr Ala Leu Ser Met Gln Asn Asn Ser  
           35                          40                          45  
 Val Phe Gly Asp Leu Lys Ser Asp Glu Met Glu Leu Leu Tyr Ser Ala

50

55

60

Val Lys Asp Ala Gly Ser Tyr Ser Lys Lys Val Val Asp Asp Leu Leu  
85 90 95

Gln Arg Arg Asn Val Pro Met Lys Pro Pro Asp Glu Ala Lys Val Gly  
 115 120 125

Lys Ser Tyr Pro Asp Val Ser Val Asp Ile Ser Met Leu Ser Ser Leu  
145 150 155 160

Asp Glu Thr Thr Lys Leu Leu Gln Asp Leu His Glu Ala Gln Ala Asp  
180 185 190

Pro Arg Gly Thr Ser Thr Thr Trp Glu Ala Leu Leu Ala  
210 215 220

<213> Homo sapiens

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

Glu Gln Tyr Val Cys Ala Gln Arg Asp Glu Tyr Leu Glu Ser Phe Cys

905

1	5	10	15
Lys Met Ala Thr Arg Lys Ile Ser Val Ile Thr Ile Phe Gly Pro Val	20	25	30
Asn Asn Ser Thr Met Lys Ile Asp His Phe Gln Leu Asp Asn Glu Lys	35	40	45
Pro Met Arg Val Val Asp Asp Glu Asp Leu Val Asp Gln Arg Leu Ile	50	55	60
Ser Glu Leu Arg Lys Glu Tyr Gly Met Thr Tyr Asn Asp Phe Phe Met	65	70	75
Val Leu Thr Asp Val Asp Leu Arg Val Lys Gln Tyr Tyr Glu Val Pro	85	90	95
Ile Thr Met Lys Ser Val Phe Asp Leu Ile Asp Thr Phe Gln Ser Arg	100	105	110
Ile Lys Asp Met Glu Lys Gln Lys Lys Glu Gly Ile Val Cys Lys Glu	115	120	125
Asp Lys Lys Gln Ser Leu Glu Asn Phe Leu Ser Arg Phe Arg Trp Arg	130	135	140
Arg Arg Leu Leu Val Ile Ser Ala Pro Asn Asp Glu Asp Trp Ala Tyr	145	150	155
Ser Gln Gln Leu Ser Ala Leu Ser Gly Gln Ala Cys Asn Phe Gly Leu	165	170	175
Arg His Ile Thr Ile Leu Lys Leu Leu Gly Val Gly Glu Glu Val Gly	180	185	190
Gly Val Leu Glu Leu Phe Pro Ile Asn Gly Ser Ser Val Val Glu Arg	195	200	205
Glu Asp Val Pro Ala His Leu Val Lys Asp Ile Arg Asn Tyr Phe Gln	210	215	220
Val Ser Pro Glu Tyr Phe Ser Met Leu Leu Val Gly Lys Asp Gly Asn	225	230	235
Val Lys Ser Trp Tyr Pro Ser Pro Met Trp Ser Met Val Ile Val Tyr	245	250	255
Asp Leu Ile Asp Ser Met Gln Leu Arg Arg Gln Glu Met Ala Ile Gln	260	265	270
Gln Ser Leu Gly Met Arg Cys Pro Glu Asp Glu Tyr Ala Gly Tyr Gly			

275                      280                      285  
 Tyr His Ser Tyr Xaa Gln Gly Tyr Gln Asp Gly Tyr Gln Asp Asp Tyr  
     290                      295                      300  
 Arg His His Glu Ser Tyr His Xaa Gly Tyr Pro Tyr  
     305                      310                      315  
  
 <210> 948  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 948  
 Ser Thr His Ala Ser Ala His Ala Ser Gly Lys Gln Cys Gln Asp Ser  
     1                      5                      10                      15  
 Lys Asp Ser Asn His Leu Pro Lys Met Ser Leu Ser Ala Phe Thr Leu  
                     20                      25                      30  
 Phe Leu Ala Leu Ile Gly Gly Thr Ser Gly Gln Tyr Tyr Asp Tyr Asp  
     35                      40                      45  
 Phe Pro Leu Ser Ile Tyr Gly Gln Ser Ser Pro Asn Cys Ala Pro Glu  
     50                      55                      60  
 Cys Asn Cys Pro Glu Ser Tyr Pro Ser Ala Met Tyr Cys Asp Glu Leu  
     65                      70                      75                      80  
 Lys Leu Lys Ser Val Pro Met Val Pro Pro Gly Ile Lys Tyr Leu Tyr  
                     85                      90                      95  
 Leu Arg Asn Asn Gln Ile Asp His Ile Asp Glu Lys Ala Phe Glu Asn  
     100                      105                      110  
 Val Thr Asp Leu Gln Trp Leu Ile Leu Asp His Asn Leu Leu Glu Asn  
     115                      120                      125  
 Ser Lys Ile Lys Gly Arg Val Phe Ser Lys Leu Lys Gln Leu Lys Lys  
     130                      135                      140  
 Leu His Ile Asn His Asn Asn Leu Thr Glu Ser Val Gly Pro Leu Pro  
     145                      150                      155                      160  
 Lys Ser

907

<210> 949  
 <211> 185  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (114)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 949  
 Leu Gly Phe Asn Tyr Tyr Tyr Lys Tyr Ser Asn Glu Gly Asp Ser His  
 1 5 10 15  
 Leu Gly Gly Gly Ser Arg Glu Gly Ser Phe Lys Glu Thr Ile Thr Leu  
 20 25 30  
 Lys Trp Cys Thr Pro Arg Thr Asn Asn Ile Glu Leu His Tyr Cys Thr  
 35 40 45  
 Gly Ala Tyr Arg Ile Ser Pro Val Asp Val Asn Ser Arg Pro Ser Ser  
 50 55 60  
 Cys Leu Thr Asn Phe Leu Leu Asn Gly Arg Ser Val Leu Leu Glu Gln  
 65 70 75 80  
 Pro Arg Lys Ser Gly Ser Lys Val Ile Ser His Met Leu Ser Ser His  
 85 90 95  
 Gly Gly Glu Ile Phe Leu His Val Leu Ser Ser Ser Arg Ser Ile Leu  
 100 105 110  
 Glu Xaa Pro Pro Ser Ile Ser Glu Gly Cys Gly Gly Arg Val Thr Asp  
 115 120 125  
 Tyr Arg Ile Thr Asp Phe Gly Glu Phe Met Arg Glu Asn Arg Leu Thr  
 130 135 140  
 Pro Phe Leu Asp Pro Arg Tyr Lys Ile Asp Gly Ser Leu Glu Val Pro  
 145 150 155 160  
 Leu Glu Arg Ala Lys Asp Gln Leu Glu Lys His Thr Arg Tyr Trp Pro  
 165 170 175  
 Met Asp His Phe Thr Asn His His Phe  
 180 185

<210> 950  
 <211> 169

908

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (161)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 950

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Pro Arg Arg Pro His Arg Ser Cys Asp Met Pro Ala Ser Gly Glu Pro
 1           5           10           15
Leu Gly Cys Thr Pro Leu Leu Pro Asn Asp Ser Gly His Pro Ser Glu
      20           25           30
Leu Gly Gly Thr Arg Arg Ala Gly Asn Gly Ala Leu Gly Gly Pro Lys
      35           40           45
Ala His Arg Lys Leu Gln Thr His Pro Ser Leu Ala Ser Gln Gly Ser
      50           55           60
Lys Lys Ser Lys Ser Ser Ser Lys Ser Thr Thr Ser Gln Ile Pro Leu
      65           70           75           80
Gln Ala Gln Glu Asp Cys Cys Val His Cys Ile Leu Ser Cys Leu Phe
      85           90           95
Cys Glu Phe Leu Thr Leu Cys Asn Ile Val Leu Asp Cys Ala Thr Cys
      100          105          110
Gly Ser Cys Ser Ser Glu Asp Ser Cys Leu Cys Cys Cys Cys Gly
      115          120          125
Ser Gly Glu Cys Ala Asp Cys Asp Leu Pro Cys Asp Leu Asp Cys Gly
      130          135          140
Ile Leu Asp Ala Cys Cys Glu Ser Ala Asp Cys Leu Glu Ile Cys Met
      145          150          155          160
Xaa Cys Cys Gly Leu Cys Phe Ser Ser
      165

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&lt;210&gt; 951

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

909

&lt;222&gt; (161)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (234)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 951

Met	Ser	Asp	Glu	Thr	Gly	Arg	Val	Pro	Glu	Arg	Asp	Thr	Lys	Arg	Met
1				5					10					15	

Gln	Val	Cys	Leu	Leu	Ser	Ala	Met	Pro	Leu	Pro	Val	Ala	Leu	Gln	Thr
			20						25					30	

Arg	Leu	Ala	Lys	Arg	Gly	Ile	Leu	Lys	His	Leu	Glu	Pro	Glu	Pro	Glu
		35					40						45		

Glu	Glu	Ile	Ile	Ala	Glu	Asp	Tyr	Asp	Asp	Asp	Pro	Val	Asp	Tyr	Glu
	50					55						60			

Ala	Thr	Arg	Leu	Glu	Gly	Leu	Pro	Pro	Ser	Trp	Tyr	Lys	Val	Phe	Asp
65						70				75					80

Pro	Ser	Cys	Gly	Leu	Pro	Tyr	Tyr	Trp	Asn	Ala	Asp	Thr	Asp	Leu	Val
				85					90					95	

Ser	Trp	Leu	Ser	Pro	His	Asp	Pro	Asn	Ser	Val	Val	Thr	Lys	Ser	Ala
		100						105						110	

Lys	Lys	Leu	Arg	Ser	Ser	Asn	Ala	Asp	Ala	Glu	Glu	Lys	Leu	Asp	Arg
		115					120						125		

Ser	His	Asp	Lys	Ser	Asp	Arg	Gly	His	Asp	Lys	Ser	Asp	Arg	Ser	His
	130						135					140			

Glu	Lys	Leu	Asp	Arg	Gly	His	Asp	Lys	Ser	Asp	Arg	Gly	His	Asp	Lys
145					150					155					160

Xaa	Asp	Arg	Asp	Arg	Glu	Arg	Gly	Tyr	Asp	Lys	Val	Asp	Arg	Glu	Arg
				165					170					175	

Glu	Arg	Asp	Arg	Glu	Arg	Asp	Arg	Asp	Arg	Gly	Tyr	Asp	Lys	Ala	Asp
			180					185						190	

Arg	Glu	Glu	Gly	Lys	Glu	Arg	Arg	His	His	Arg	Arg	Glu	Glu	Leu	Ala
		195						200						205	

Pro	Tyr	Pro	Lys	Ser	Lys	Lys	Ala	Val	Ser	Arg	Lys	Asp	Glu	Glu	Leu
	210						215					220			

910

Asp Pro Met Asp Pro Ser Ser Tyr Ser Xaa Arg Pro Arg Gly Thr Trp  
225 230 235 240

Ser Thr Gly Leu Pro Lys Arg Asn Glu Ala Lys Thr Gly Ala Asp Thr  
245 250 255

Thr Ala Ala Gly Pro Leu Phe Gln Gln Arg Pro Tyr Pro Ser Pro Gly  
260 265 270

Ala Val Leu Arg Ala Asn Ala Glu Ala Ser Arg Thr Lys Gln Gln Asp  
275 280 285

<210> 952

<211> 323

<212> PRT

<213> Homo sapiens

<400> 952

Val Gly Gly Val Leu Pro Gly Trp Lys Leu Arg Pro Arg Ser Asp Gly  
1 5 10 15

Gly Leu Ser Glu Asp Gly Pro Gly Arg Asp His Gly Gly Gly Ser Arg  
20 25 30

Gly Gly Arg Gly Gly Ala Ala Gly Gly Arg Gly Gly Cys Gly Pro Gln  
35 40 45

Gly Ala Val Gly Gly Gly Met Ala Arg Ala Ser Ser Gly Asn Gly Ser  
50 55 60

Glu Glu Ala Trp Gly Ala Leu Arg Ala Pro Gln Gln Gln Leu Arg Glu  
65 70 75 80

Leu Cys Pro Gly Val Asn Asn Gln Pro Tyr Leu Cys Glu Ser Gly His  
85 90 95

Cys Cys Gly Glu Thr Gly Cys Cys Thr Tyr Tyr Tyr Glu Leu Trp Trp  
100 105 110

Phe Trp Leu Leu Trp Thr Val Leu Ile Leu Phe Ser Cys Cys Ala  
115 120 125

Phe Arg His Arg Arg Ala Lys Leu Arg Leu Gln Gln Gln Gln Arg Gln  
130 135 140

Arg Glu Ile Asn Leu Leu Ala Tyr His Gly Ala Cys His Gly Ala Gly



911

145                      150                      155                      160  
 Pro Phe Pro Thr Gly Ser Leu Leu Asp Leu Arg Phe Leu Ser Thr Phe  
                                  165                      170                      175  
 Lys Pro Pro Ala Tyr Glu Asp Val Val His Arg Pro Gly Thr Pro Pro  
                                  180                      185                      190  
 Pro Pro Tyr Thr Val Ala Pro Gly Arg Pro Leu Thr Ala Ser Ser Glu  
                                  195                      200                      205  
 Gln Thr Cys Cys Ser Ser Ser Ser Ser Cys Pro Ala His Phe Glu Gly  
                                  210                      215                      220  
 Thr Asn Val Glu Gly Val Ser Ser His Gln Ser Ala Pro Pro His Gln  
 225                                   230                      235                      240  
 Glu Gly Glu Pro Gly Ala Gly Val Thr Pro Ala Ser Thr Pro Pro Ser  
                                  245                      250                      255  
 Cys Arg Tyr Arg Arg Leu Thr Gly Asp Ser Gly Ile Glu Leu Cys Pro  
                                  260                      265                      270  
 Cys Pro Ala Ser Gly Glu Gly Glu Pro Val Lys Glu Val Arg Val Ser  
                                  275                      280                      285  
 Ala Thr Leu Pro Asp Leu Glu Asp Tyr Ser Pro Cys Ala Leu Pro Pro  
                                  290                      295                      300  
 Glu Ser Val Pro Gln Ile Phe Pro Met Gly Leu Ser Ser Ser Glu Gly  
 305                                   310                      315                      320  
 Asp Ile Pro

&lt;210&gt; 953

&lt;211&gt; 433

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 953

Ala Lys Met Ser Val Asn Val Asn Arg Ser Val Ser Asp Gln Phe Tyr  
 1                      5                      10                      15

Arg Tyr Lys Met Pro Arg Leu Ile Ala Lys Val Glu Gly Lys Gly Asn  
 20                      25                      30

Gly Ile Lys Thr Val Ile Val Asn Met Val Asp Val Ala Lys Ala Leu  
 35                      40                      45

Asn Arg Pro Pro Thr Tyr Pro Thr Lys Tyr Phe Gly Cys Glu Leu Gly  
 50 55 60

Ala Gln Thr Gln Phe Asp Val Lys Asn Asp Arg Tyr Ile Val Asn Gly  
 65 70 75 80

Ser His Glu Ala Asn Lys Leu Gln Asp Met Leu Asp Gly Phe Ile Lys  
 85 90 95

Lys Phe Val Leu Cys Pro Glu Cys Glu Asn Pro Glu Thr Asp Leu His  
 100 105 110

Val Asn Pro Lys Lys Gln Thr Ile Gly Asn Ser Cys Lys Ala Cys Gly  
 115 120 125

Tyr Arg Gly Met Leu Asp Thr His His Lys Leu Cys Thr Phe Ile Leu  
 130 135 140

Lys Asn Pro Pro Glu Asn Ser Asp Ser Gly Thr Gly Lys Lys Glu Lys  
 145 150 155 160

Glu Lys Lys Asn Arg Lys Gly Lys Asp Lys Glu Asn Gly Ser Val Ser  
 165 170 175

Ser Ser Glu Thr Pro Pro Pro Pro Pro Pro Pro Asn Glu Ile Asn Pro  
 180 185 190

Pro Pro His Thr Met Glu Glu Glu Glu Asp Asp Asp Trp Gly Glu Asp  
 195 200 205

Thr Thr Glu Glu Ala Gln Arg Arg Arg Met Asp Glu Ile Ser Asp His  
 210 215 220

Ala Lys Val Leu Thr Leu Ser Asp Asp Leu Glu Arg Thr Ile Glu Glu  
 225 230 235 240

Arg Val Asn Ile Leu Phe Asp Phe Val Lys Lys Lys Lys Glu Glu Gly  
 245 250 255

Val Ile Asp Ser Ser Asp Lys Glu Ile Val Ala Glu Ala Glu Arg Leu  
 260 265 270

Asp Val Lys Ala Met Gly Pro Leu Val Leu Thr Glu Val Leu Phe Asn  
 275 280 285

Glu Lys Ile Arg Glu Gln Ile Lys Lys Tyr Arg Arg His Phe Leu Arg  
 290 295 300

Phe Cys His Asn Asn Lys Lys Ala Gln Arg Tyr Leu Leu His Gly Leu  
 305 310 315 320

913

Glu Cys Val Val Ala Met His Gln Ala Gln Leu Ile Ser Lys Ile Pro  
                           325                          330                          335  
 His Ile Leu Lys Glu Met Tyr Asp Ala Asp Leu Leu Glu Glu Glu Val  
                           340                          345                          350  
 Ile Ile Ser Trp Ser Glu Lys Ala Ser Lys Lys Tyr Val Ser Lys Glu  
                           355                          360                          365  
 Leu Ala Lys Glu Ile Arg Val Lys Ala Glu Pro Phe Ile Lys Trp Leu  
                           370                          375                          380  
 Lys Glu Ala Glu Glu Glu Ser Ser Gly Gly Glu Glu Glu Asp Glu Asp  
                           385                          390                          395                          400  
 Glu Asn Ile Glu Val Val Tyr Ser Lys Ala Ala Ser Val Pro Lys Val  
                           405                          410                          415  
 Glu Thr Val Lys Ser Asp Asn Lys Asp Asp Asp Ile Asp Ile Asp Ala  
                           420                          425                          430  
 Ile

&lt;210&gt; 954

&lt;211&gt; 428

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 954

Gly Tyr Gln Ile Gly Met Ala Leu Ala Ser Gly Pro Ala Arg Arg Ala  
   1                          5                          10                          15  
 Leu Ala Gly Ser Gly Gln Leu Gly Leu Gly Gly Phe Gly Ala Pro Arg  
                           20                          25                          30  
 Arg Gly Ala Tyr Glu Trp Gly Val Arg Ser Thr Arg Lys Ser Glu Pro  
                           35                          40                          45  
 Pro Pro Leu Asp Arg Val Tyr Glu Ile Pro Gly Leu Glu Pro Ile Thr  
                           50                          55                          60  
 Phe Ala Gly Lys Met His Phe Val Pro Trp Leu Ala Arg Pro Ile Phe  
   65                          70                          75                          80  
 Pro Pro Trp Asp Arg Gly Tyr Lys Asp Pro Arg Phe Tyr Arg Ser Pro  
                           85                          90                          95

914

Pro Leu His Glu His Pro Leu Tyr Lys Asp Gln Ala Cys Tyr Ile Phe  
 100 105 110  
 His His Arg Cys Arg Leu Leu Glu Gly Val Lys Gln Ala Leu Trp Leu  
 115 120 125  
 Thr Lys Thr Lys Leu Ile Glu Gly Leu Pro Glu Lys Val Leu Ser Leu  
 130 135 140  
 Val Asp Asp Pro Arg Asn His Ile Glu Asn Gln Asp Glu Cys Val Leu  
 145 150 155 160  
 Asn Val Ile Ser His Ala Arg Leu Trp Gln Thr Thr Glu Glu Ile Pro  
 165 170 175  
 Lys Arg Glu Thr Tyr Cys Pro Val Ile Val Asp Asn Leu Ile Gln Leu  
 180 185 190  
 Cys Lys Ser Gln Ile Leu Lys His Pro Ser Leu Ala Arg Arg Ile Cys  
 195 200 205  
 Val Gln Asn Ser Thr Phe Ser Ala Thr Trp Asn Arg Glu Ser Leu Leu  
 210 215 220  
 Leu Gln Val Arg Gly Ser Gly Gly Ala Arg Leu Ser Thr Lys Asp Pro  
 225 230 235 240  
 Leu Pro Thr Ile Ala Ser Arg Glu Glu Ile Glu Ala Thr Lys Asn His  
 245 250 255  
 Val Leu Glu Thr Phe Tyr Pro Ile Ser Pro Ile Ile Asp Leu His Glu  
 260 265 270  
 Cys Asn Ile Tyr Asp Val Lys Asn Asp Thr Gly Phe Gln Glu Gly Tyr  
 275 280 285  
 Pro Tyr Pro Tyr Pro His Thr Leu Tyr Leu Leu Asp Lys Ala Asn Leu  
 290 295 300  
 Arg Pro His Arg Leu Gln Pro Asp Gln Leu Arg Ala Lys Met Ile Leu  
 305 310 315 320  
 Phe Ala Phe Gly Ser Ala Leu Ala Gln Ala Arg Leu Leu Tyr Gly Asn  
 325 330 335  
 Asp Ala Lys Val Leu Glu Gln Pro Val Val Val Gln Ser Val Gly Thr  
 340 345 350  
 Asp Gly Arg Val Phe His Phe Leu Val Phe Gln Leu Asn Thr Thr Asp  
 355 360 365

915

Leu Asp Ser Asn Glu Gly Val Lys Asn Leu Ala Trp Val Asp Ser Asp  
 370 375 380

Gln Leu Leu Tyr Gln His Phe Trp Cys Leu Pro Val Ile Lys Lys Arg  
 385 390 395 400

Val Val Val Glu Pro Val Gly Pro Val Gly Phe Lys Pro Glu Thr Phe  
 405 410 415

Arg Lys Phe Leu Ala Leu Tyr Leu His Gly Ala Ala  
 420 425

<210> 955

<211> 169

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (140)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (166)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 955

Asp Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val Arg Glu Pro Gly  
 1 5 10 15

Asp Arg Met Leu Val Leu Val Leu Gly Asp Leu His Ile Pro His Arg  
 20 25 30

Cys Asn Ser Leu Pro Ala Lys Phe Lys Lys Leu Leu Val Pro Gly Lys  
 35 40 45

Ile Gln His Ile Leu Cys Thr Gly Asn Leu Cys Thr Lys Glu Ser Tyr  
 50 55 60

Asp Tyr Leu Lys Thr Leu Ala Gly Asp Val His Ile Val Arg Gly Asp  
 65 70 75 80

Phe Asp Glu Asn Leu Asn Tyr Pro Glu Gln Lys Val Val Thr Val Gly

916

85 90 95  
Gln Phe Lys Ile Gly Leu Ile His Gly His Gln Val Ile Pro Trp Gly  
100 105 110  
Asp Met Ala Ser Leu Ala Leu Leu Gln Arg Gln Phe Asp Val Asp Ile  
115 120 125  
Leu Ile Xaa Gly His Thr His Lys Phe Glu Ala Xaa Glu His Glu Asn  
130 135 140  
Lys Phe Tyr Ile Asn Pro Gly Ser Ala Thr Gly Ala Tyr Asn Ala Leu  
145 150 155 160  
Glu Thr Asn Ile Ile Xaa Ser Leu Cys  
165

<210> 956  
<211> 39  
<212> PRT  
<213> Homo sapiens

<400> 956  
Ser Pro Tyr Cys Gly Leu Gln Val Met Leu Phe Leu Leu His His Thr  
1 5 10 15  
Leu Trp Cys Leu Leu Pro Cys Ala Ser Ser Leu Arg Leu Ile Lys Lys  
20 25 30  
Val Ser Arg Leu Leu Gln Leu  
35

<210> 957  
<211> 219  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (7)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (9)  
<223> Xaa equals any of the naturally occurring L-amino acids

917

&lt;400&gt; 957

Gln Gly His Cys Gly Cys Xaa Leu Xaa Ser Leu Leu Ala Asn Gly His  
 1 5 10 15  
 Asp Leu Ala Ala Ala Met Ala Val Asp Lys Ser Asn Pro Thr Ser Lys  
 20 25 30  
 His Lys Ser Gly Ala Val Ala Ser Leu Leu Ser Lys Ala Glu Arg Ala  
 35 40 45  
 Thr Glu Leu Ala Ala Glu Gly Gln Leu Thr Leu Gln Gln Phe Ala Gln  
 50 55 60  
 Ser Thr Glu Met Leu Lys Arg Val Val Gln Glu His Leu Pro Leu Met  
 65 70 75 80  
 Ser Glu Ala Gly Ala Gly Leu Pro Asp Met Glu Ala Val Ala Gly Ala  
 85 90 95  
 Glu Ala Leu Asn Gly Gln Ser Asp Phe Pro Tyr Leu Gly Ala Phe Pro  
 100 105 110  
 Ile Asn Pro Gly Leu Phe Ile Met Thr Pro Ala Gly Val Phe Leu Ala  
 115 120 125  
 Glu Ser Ala Leu His Met Ala Gly Leu Ala Glu Tyr Pro Met Gln Gly  
 130 135 140  
 Glu Leu Ala Ser Ala Ile Ser Ser Gly Lys Lys Lys Arg Lys Arg Cys  
 145 150 155 160  
 Gly Met Cys Ala Pro Cys Arg Arg Arg Ile Asn Cys Glu Gln Cys Ser  
 165 170 175  
 Ser Cys Arg Asn Arg Lys Thr Gly His Gln Ile Cys Lys Phe Arg Lys  
 180 185 190  
 Cys Glu Glu Leu Lys Lys Lys Pro Ser Ala Ala Leu Glu Lys Val Met  
 195 200 205  
 Leu Pro Thr Gly Ala Ala Phe Arg Trp Phe Gln  
 210 215

&lt;210&gt; 958

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (74)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 958

Leu Pro Gln Asn Ala Val Leu Glu Ala Asp Phe Ala Lys Arg Gly Tyr  
 1 5 10 15

Lys Leu Pro Lys Xaa Arg Lys Thr Gly Thr Thr Ile Ala Gly Val Val  
 20 25 30

Tyr Lys Asp Gly Ile Val Leu Gly Ala Asp Thr Arg Ala Thr Glu Gly  
 35 40 45

Met Val Val Ala Asp Lys Asn Cys Ser Lys Ile His Phe Ile Ser Pro  
 50 55 60

Asn Ile Tyr Cys Cys Gly Ala Gly Thr Xaa Ala Asp Thr Asp Met Thr  
 65 70 75 80

Thr Gln Leu Ile Ser Ser Asn Leu Glu Leu His Ser Leu Ser Thr Gly  
 85 90 95

Arg Leu Pro Arg Val Val Thr Ala Asn Arg Met Leu Lys Gln Met Leu  
 100 105 110

Phe Arg Tyr Gln Gly Tyr Ile Gly Ala Ala Leu Val Leu Gly Gly Val  
 115 120 125

Asp Val Thr Gly Pro His Leu Tyr Ser Ile Tyr Pro His Gly Ser Thr  
 130 135 140

Asp Lys Leu Pro Tyr Val Thr Met Gly Ser Gly Ser Leu Ala Ala Met  
 145 150 155 160

Ala Val Phe Glu Asp Lys Phe Arg Pro Asp Met Glu Glu Glu Glu Ala  
 165 170 175

Lys Asn Leu Val Ser Glu Ala Ile Ala Ala Gly Ile Phe Asn Asp Leu  
 180 185 190

Gly Ser Gly Ser Asn Ile Asp Leu Cys Val Ile Ser Lys Asn Lys Leu  
 195 200 205

Asp Phe Leu Arg Pro Tyr Thr Val Pro Asn Lys Lys Gly Thr Arg Leu  
 210 215 220



919

Gly Arg Tyr Arg Cys Glu Lys Gly Thr Thr Ala Val Leu Thr Glu Lys  
225 230 235 240

Ile Thr Pro Leu Glu Ile Glu Val Leu Glu Glu Thr Val Gln Thr Met  
245 250 255

Asp Thr Ser

<210> 959

<211> 75

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 959

Phe Trp Ser Ala Ala Lys Phe Asp Phe Thr Ser His Thr Pro Phe Leu  
1 5 10 15

Pro Leu Glu Met Gln Phe Arg Gln Arg Pro Cys Gly Glu Ser Cys Asn  
20 25 30

Ile Lys Phe Xaa Phe Arg Arg Ser Xaa Pro Gln Thr Ser Glu Pro Leu  
35 40 45

Ala Val Leu Pro Xaa Asn Lys Asn Glu Leu Glu Lys Lys Val Ala Gln  
50 55 60

Leu Gln Arg Ser Lys Ser Ser Tyr Phe Pro Thr  
65 70 75

<210> 960

920

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 960

Gln Ser Arg Gly Leu Arg Leu Leu Gly Pro Gly Asp Gly Ala Gly Met  
 1 5 10 15

Thr Pro Gly Val Val His Ala Ser Pro Pro Gln Ser Gln Arg Val Pro  
 20 25 30

Arg Gln Ala Pro Cys Glu Trp Ala Ile Arg Asn Ile Gly Gln Lys Pro  
 35 40 45

Lys Glu Pro Asn Cys His Asn Cys Gly Thr His Ile Gly Leu Arg Ser  
 50 55 60

Lys Thr Leu Arg Gly Thr Pro Asn Tyr Leu Pro Ile Arg Gln Asp Thr  
 65 70 75 80

His Pro Pro Ser Val Ile Phe Cys Leu Ala Gly Val Gly Val Pro Gly  
 85 90 95

Gly Thr Cys Arg Pro Ala Pro Cys Val Pro Arg Phe Ala Ala Leu Pro  
 100 105 110

Trp Ala Thr Asn His Pro Gly Pro Gly Cys Leu Ser Asp Leu Arg Ala  
 115 120 125

&lt;210&gt; 961

&lt;211&gt; 564

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 961

Lys Met Lys Ser Val Lys Ile Ala Phe Ala Val Thr Leu Glu Thr Val  
 1 5 10 15

Leu Ala Gly His Glu Asn Trp Val Asn Ala Val His Trp Gln Pro Val  
 20 25 30

Phe Tyr Lys Asp Gly Val Leu Gln Gln Pro Val Arg Leu Leu Ser Ala  
 35 40 45

Ser Met Asp Lys Thr Met Ile Leu Trp Ala Pro Asp Glu Glu Ser Gly  
 50 55 60

921

Val Trp Leu Glu Gln Val Arg Val Gly Glu Val Gly Gly Asn Thr Leu  
 65 70 75 80  
 Gly Phe Tyr Asp Cys Gln Phe Asn Glu Asp Gly Ser Met Ile Ile Ala  
 85 90 95  
 His Ala Phe His Gly Ala Leu His Leu Trp Lys Gln Asn Thr Val Asn  
 100 105 110  
 Pro Arg Glu Trp Thr Pro Glu Ile Val Ile Ser Gly His Phe Asp Gly  
 115 120 125  
 Val Gln Asp Leu Val Trp Asp Pro Glu Gly Glu Phe Ile Ile Thr Val  
 130 135 140  
 Gly Thr Asp Gln Thr Thr Arg Leu Phe Ala Pro Trp Lys Arg Lys Asp  
 145 150 155 160  
 Gln Ser Gln Val Thr Trp His Glu Ile Ala Arg Pro Gln Ile His Gly  
 165 170 175  
 Tyr Asp Leu Lys Cys Leu Ala Met Ile Asn Arg Phe Gln Phe Val Ser  
 180 185 190  
 Gly Ala Asp Glu Lys Val Leu Arg Val Phe Ser Ala Pro Arg Asn Phe  
 195 200 205  
 Val Glu Asn Phe Cys Ala Ile Thr Gly Gln Ser Leu Asn His Val Leu  
 210 215 220  
 Cys Asn Gln Asp Ser Asp Leu Pro Glu Gly Ala Thr Val Pro Ala Leu  
 225 230 235 240  
 Gly Leu Ser Asn Lys Ala Val Phe Gln Gly Asp Ile Ala Ser Gln Pro  
 245 250 255  
 Ser Asp Glu Glu Glu Leu Leu Thr Ser Thr Gly Phe Glu Tyr Gln Gln  
 260 265 270  
 Val Ala Phe Gln Pro Ser Ile Leu Thr Glu Pro Pro Thr Glu Asp His  
 275 280 285  
 Leu Leu Gln Asn Thr Leu Trp Pro Glu Val Gln Lys Leu Tyr Gly His  
 290 295 300  
 Gly Tyr Glu Ile Phe Cys Val Thr Cys Asn Ser Ser Lys Thr Leu Leu  
 305 310 315 320  
 Ala Ser Ala Cys Lys Ala Ala Lys Lys Glu His Ala Ala Ile Ile Leu  
 325 330 335

922

Trp Asn Thr Thr Ser Trp Lys Gln Val Gln Asn Leu Val Phe His Ser  
 340 345 350  
 Leu Thr Val Thr Gln Met Ala Phe Ser Pro Asn Glu Lys Phe Leu Leu  
 355 360 365  
 Ala Val Ser Arg Asp Arg Thr Trp Ser Leu Trp Lys Lys Gln Asp Thr  
 370 375 380  
 Ile Ser Pro Glu Phe Glu Pro Val Phe Ser Leu Phe Ala Phe Thr Asn  
 385 390 395 400  
 Lys Ile Thr Ser Val His Ser Arg Ile Ile Trp Ser Cys Asp Trp Ser  
 405 410 415  
 Pro Asp Ser Lys Tyr Phe Phe Thr Gly Ser Arg Asp Lys Lys Val Val  
 420 425 430  
 Val Trp Gly Glu Cys Asp Ser Thr Asp Asp Cys Ile Glu His Asn Ile  
 435 440 445  
 Gly Pro Cys Ser Ser Val Leu Asp Val Gly Gly Ala Val Thr Ala Val  
 450 455 460  
 Ser Val Cys Pro Val Leu His Pro Ser Gln Arg Tyr Val Val Ala Val  
 465 470 475 480  
 Gly Leu Glu Cys Gly Lys Ile Cys Leu Tyr Thr Trp Lys Lys Thr Asp  
 485 490 495  
 Gln Val Pro Glu Ile Asn Asp Trp Thr His Cys Val Glu Thr Ser Gln  
 500 505 510  
 Ser Gln Ser His Thr Leu Ala Ile Arg Lys Leu Cys Trp Lys Asn Cys  
 515 520 525  
 Ser Gly Lys Thr Glu Gln Lys Glu Ala Glu Gly Ala Glu Trp Leu His  
 530 535 540  
 Phe Ala Ser Cys Gly Glu Asp His Thr Val Lys Ile His Arg Val Asn  
 545 550 555 560  
 Lys Cys Ala Leu

&lt;210&gt; 962

&lt;211&gt; 43

&lt;212&gt; PRT

923

&lt;213&gt; Homo sapiens

&lt;400&gt; 962

Phe Lys Tyr Val Lys Cys Gly Ser Phe Thr Pro His His Ser Glu His  
 1 5 10 15

Thr Gly Glu Met Cys Phe Phe Gly Lys Leu Lys Gly Ala Ser Ser Leu  
 20 25 30

Ile Gln Arg Asn Ile Ser His Val Cys Ser Phe  
 35 40

&lt;210&gt; 963

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (131)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 963

Glu Ser Arg Val Asp Pro Arg Val Arg Glu Arg Ser Ala Arg Thr Ala  
 1 5 10 15

Gly Ala Thr Val Gly Pro Ala Ala Val Met Ser Val Leu Arg Pro Leu  
 20 25 30

Asp Lys Leu Pro Gly Leu Asn Thr Ala Thr Ile Leu Leu Val Gly Thr  
 35 40 45

Glu Asp Ala Leu Leu Gln Gln Leu Ala Asp Ser Met Leu Lys Glu Asp  
 50 55 60

Cys Ala Ser Glu Leu Lys Val His Leu Ala Lys Ser Leu Pro Leu Pro  
 65 70 75 80

Ser Ser Val Asn Arg Pro Arg Ile Asp Leu Ile Val Phe Val Val Asn  
 85 90 95

Leu His Ser Lys Tyr Ser Leu Gln Asn Thr Glu Glu Ser Leu Arg His  
 100 105 110

Val Asp Ala Ser Phe Phe Leu Gly Lys Val Cys Phe Leu Ala Thr Gly  
 115 120 125

Gly Gly Xaa Leu  
 130

924

<210> 964  
 <211> 175  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (13)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (72)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 964  
 His Glu Arg Ser Cys Cys Asp Ala Arg Ser Glu Ala Xaa Gln Gly Arg  
 1 5 10 15  
 Gly Arg Val Gly Ala Gly Ala Gly Ala Ala Trp Ser Ser Cys Gly Val  
 20 25 30  
 Ser Gly Pro Gly Arg Gly Met Gly Val Leu Ala Ala Ala Ala Arg Cys  
 35 40 45  
 Leu Val Arg Gly Ala Asp Arg Met Ser Lys Trp Thr Ser Lys Arg Gly  
 50 55 60  
 Pro Arg Ser Phe Arg Gly Arg Xaa Gly Arg Gly Ala Lys Gly Ile Gly  
 65 70 75 80  
 Phe Leu Thr Ser Gly Trp Arg Phe Val Gln Ile Lys Glu Met Val Pro  
 85 90 95  
 Glu Phe Val Val Pro Asp Leu Thr Gly Phe Lys Leu Lys Pro Tyr Val  
 100 105 110  
 Ser Tyr Leu Ala Pro Glu Ser Glu Glu Thr Pro Leu Thr Ala Ala Gln  
 115 120 125  
 Leu Phe Ser Glu Ala Val Ala Pro Ala Ile Glu Lys Asp Phe Lys Asp  
 130 135 140  
 Gly Thr Phe Asp Pro Asp Asn Leu Glu Lys Tyr Gly Phe Glu Pro Thr  
 145 150 155 160  
 Gln Glu Gly Lys Leu Phe Gln Leu Tyr Pro Arg Asn Phe Leu Arg  
 165 170 175

925

<210> 965  
 <211> 363  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (356)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 965

Leu Leu Arg Arg Leu Arg Thr Ala Val Pro Gly Ser Leu Glu Ala Gln  
 1 5 10 15

Lys Arg Lys Pro Ser Pro Gly Pro Gly Ser Leu Asp Leu Val Ser Leu  
 20 25 30

Gly Ser Gly Asn Ser Gly Ser Gln Arg Thr Val Leu Ile Met Asp Lys  
 35 40 45

Gln Asn Ser Gln Met Asn Ala Ser His Pro Glu Thr Asn Leu Pro Val  
 50 55 60

Gly Tyr Pro Pro Gln Tyr Pro Pro Thr Ala Phe Gln Gly Pro Pro Gly  
 65 70 75 80

Tyr Ser Gly Tyr Pro Gly Pro Gln Val Ser Tyr Pro Pro Pro Pro Ala  
 85 90 95

Gly His Ser Gly Pro Gly Pro Ala Gly Phe Pro Val Pro Asn Gln Pro  
 100 105 110

Val Tyr Asn Gln Pro Val Tyr Asn Gln Pro Val Gly Ala Ala Gly Val  
 115 120 125

Pro Trp Met Pro Ala Pro Gln Pro Pro Leu Asn Cys Pro Pro Gly Leu  
 130 135 140

Glu Tyr Leu Ser Gln Ile Asp Gln Ile Leu Ile His Gln Gln Ile Glu  
 145 150 155 160

Leu Leu Glu Val Leu Thr Gly Phe Glu Thr Asn Asn Lys Tyr Glu Ile  
 165 170 175

Lys Asn Ser Phe Gly Gln Arg Val Tyr Phe Ala Ala Glu Asp Thr Asp  
 180 185 190

Cys Cys Thr Arg Asn Cys Cys Gly Pro Ser Arg Pro Phe Thr Leu Arg

926

195	200	205
Ile Ile Asp Asn Met Gly Gln Glu Val Ile Thr Leu Glu Arg Pro Leu		
210	215	220
Arg Cys Ser Ser Cys Cys Cys Pro Cys Cys Leu Gln Glu Ile Glu Ile		
225	230	235 240
Gln Ala Pro Pro Gly Val Pro Ile Gly Tyr Val Ile Gln Thr Trp His		
245	250	255
Pro Cys Leu Pro Lys Phe Thr Ile Gln Asn Glu Lys Arg Glu Asp Val		
260	265	270
Leu Lys Ile Ser Gly Pro Cys Val Val Cys Ser Cys Cys Gly Asp Val		
275	280	285
Asp Phe Glu Ile Lys Ser Leu Asp Glu Gln Cys Val Val Gly Lys Ile		
290	295	300
Ser Lys His Trp Thr Gly Ile Leu Arg Glu Ala Phe Thr Asp Ala Asp		
305	310	315 320
Asn Phe Gly Ile Gln Phe Pro Leu Asp Leu Asp Val Lys Met Lys Ala		
325	330	335
Val Met Ile Gly Ala Cys Phe Leu Ile Asp Phe Met Phe Phe Glu Ser		
340	345	350
Thr Gly Ser Xaa Glu Gln Lys Ser Gly Val Trp		
355	360	

&lt;210&gt; 966

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 966

Ala Glu Val His Thr Arg Lys Gln Gly Pro Glu Ala Glu Pro Ala Ala		
1	5	10 15
Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu		
20	25	30
Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro		
35	40	45
Cys Gly Phe Glu Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu		
50	55	60



927

Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala  
65 70 75 80  
Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn  
85 90 95  
Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg Arg Ala  
100 105 110  
Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro Pro Cys  
115 120 125  
Val Ile Leu  
130

<210> 967  
<211> 344  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (68)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (306)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 967  
Pro Thr Pro Ala Ser His Ser Pro Ser Pro Ser Leu Pro Ala Leu Pro  
1 5 10 15  
Pro Ser Pro Pro His Arg Pro Asp Ser Pro Leu Phe Asn Ser Arg Cys  
20 25 30  
Ser Ser Pro Leu Gln Leu Asn Leu Leu Gln Leu Glu Glu Leu Pro Arg  
35 40 45  
Ala Glu Gly Ala Ala Val Ala Gly Gly Pro Gly Ser Ser Ala Gly Pro  
50 55 60  
Pro Pro Pro Xaa Ala Glu Ala Ala Glu Pro Glu Ala Arg Leu Ala Glu  
65 70 75 80  
Val Thr Glu Ser Ser Asn Gln Asp Ala Leu Ser Gly Ser Ser Asp Leu  
85 90 95

Leu Glu Leu Leu Leu Gln Glu Asp Ser Arg Ser Gly Thr Gly Ser Ala  
100 105 110

Ala Ser Gly Ser Leu Gly Ser Gly Leu Gly Ser Gly Ser Gly Ser Gly  
115 120 125

Ser His Glu Gly Gly Ser Thr Ser Ala Ser Ile Thr Arg Ser Ser Gln  
130 135 140

Ser Ser His Thr Ser Lys Tyr Phe Gly Ser Ile Asp Ser Ser Glu Ala  
145 150 155 160

Glu Ala Gly Ala Ala Arg Gly Gly Ala Glu Pro Gly Asp Gln Val Ile  
165 170 175

Lys Tyr Val Leu Gln Asp Pro Ile Trp Leu Leu Met Ala Asn Ala Asp  
180 185 190

Gln Arg Val Met Met Thr Tyr Gln Val Pro Ser Arg Asp Met Thr Ser  
195 200 205

Val Leu Lys Gln Asp Arg Glu Arg Leu Arg Ala Met Gln Lys Gln Gln  
210 215 220

Pro Arg Phe Ser Glu Asp Gln Arg Arg Glu Leu Gly Ala Val His Ser  
225 230 235 240

Trp Val Arg Lys Gly Gln Leu Pro Arg Ala Leu Asp Val Met Ala Cys  
245 250 255

Val Asp Cys Gly Ser Ser Thr Gln Asp Pro Gly His Pro Asp Asp Pro  
260 265 270

Leu Phe Ser Glu Leu Asp Gly Leu Gly Leu Glu Pro Met Glu Glu Gly  
275 280 285

Gly Gly Glu Gln Gly Ser Ser Gly Gly Gly Ser Gly Glu Gly Glu Gly  
290 295 300

Cys Xaa Glu Ala Gln Gly Gly Ala Lys Ala Ser Ser Ser Gln Asp Leu  
305 310 315 320

Ala Met Glu Glu Glu Glu Gly Arg Ser Ser Ser Ser Pro Ala Leu  
325 330 335

Pro Thr Ala Gly Asn Cys Thr Ser  
340

929

&lt;210&gt; 968

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 968

Arg Cys Ser Ser Phe Phe Leu Ser Leu Leu Val Lys Ile Thr Asn Ile  
1 5 10 15

Trp Glu Gly Phe Lys Asp Ala Cys Tyr Gly Ala Asn Val Leu Ser Leu  
20 25 30

Leu Asn Ser Arg Ser Glu Leu Leu Thr Cys Ile Gln Asn Ile Asn Ala  
35 40 45

Gln Asn Leu Tyr Met Ser Pro Ile Arg Lys Ile His Trp His Ala Thr  
50 55 60

Gly Asp Ser  
65

&lt;210&gt; 969

&lt;211&gt; 325

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 969

Leu Asn Leu Arg Ser Pro His Ile Cys Phe Arg Ser Ser Lys Pro Ser  
1 5 10 15

Trp Ala Asp Gln Val Glu Glu Glu Gly Glu Asp Asp Lys Cys Val Thr  
20 25 30

Ser Glu Leu Leu Lys Gly Ile Pro Leu Ala Thr Gly Asp Thr Ser Pro  
35 40 45

Glu Pro Glu Leu Leu Pro Gly Ala Pro Leu Pro Pro Pro Lys Glu Val  
50 55 60

Ile Asn Gly Asn Ile Lys Thr Val Thr Glu Tyr Lys Ile Asp Glu Asp  
65 70 75 80

Gly Lys Lys Phe Lys Ile Val Arg Thr Phe Arg Ile Glu Thr Arg Lys  
85 90 95

Ala Ser Lys Ala Val Ala Arg Arg Lys Asn Trp Lys Lys Phe Gly Asn  
100 105 110

Ser Glu Phe Asp Pro Pro Gly Pro Asn Val Ala Thr Thr Thr Val Ser

930

115	120	125
Asp Asp Val Ser Met Thr Phe Ile Thr Ser Lys Glu Asp Leu Asn Cys		
130	135	140
Gln Glu Glu Glu Asp Pro Met Asn Lys Leu Lys Gly Gln Lys Ile Val		
145	150	155 160
Ser Cys Arg Ile Cys Lys Gly Asp His Trp Thr Thr Arg Cys Pro Tyr		
165	170	175
Lys Asp Thr Leu Gly Pro Met Gln Lys Glu Leu Ala Glu Gln Leu Gly		
180	185	190
Leu Ser Thr Gly Glu Lys Glu Lys Leu Pro Gly Glu Leu Glu Pro Val		
195	200	205
Gln Ala Thr Gln Asn Lys Thr Gly Lys Tyr Val Pro Pro Ser Leu Arg		
210	215	220
Asp Gly Ala Ser Arg Arg Gly Glu Ser Met Gln Pro Asn Arg Arg Ala		
225	230	235 240
Asp Asp Asn Ala Thr Ile Arg Val Thr Asn Leu Ser Glu Asp Thr Arg		
245	250	255
Glu Thr Asp Leu Gln Glu Leu Phe Arg Pro Phe Gly Ser Ile Ser Arg		
260	265	270
Ile Tyr Leu Ala Lys Asp Lys Thr Thr Gly Gln Ser Lys Gly Phe Ala		
275	280	285
Phe Ile Ser Phe His Arg Arg Glu Asp Ala Ala Arg Ala Ile Ala Gly		
290	295	300
Val Ser Gly Phe Gly Tyr Asp His Leu Ile Leu Asn Val Glu Trp Ala		
305	310	315 320
Lys Pro Ser Thr Asn		
325		

<210> 970  
 <211> 357  
 <212> PRT  
 <213> Homo sapiens

<400> 970  
 Val Arg Val Lys Met Ala Ala Ala Glu Ala Ala Asn Cys Ile Met Glu  
 1 5 10 15

Val Ser Cys Gly Gln Ala Glu Ser Ser Glu Lys Pro Asn Ala Glu Asp  
 20 25 30  
 Met Thr Ser Lys Asp Tyr Tyr Phe Asp Ser Tyr Ala His Phe Gly Ile  
 35 40 45  
 His Glu Glu Met Leu Lys Asp Glu Val Arg Thr Leu Thr Tyr Arg Asn  
 50 55 60  
 Ser Met Phe His Asn Arg His Leu Phe Lys Asp Lys Val Val Leu Asp  
 65 70 75 80  
 Val Gly Ser Gly Thr Gly Ile Leu Cys Met Phe Ala Ala Lys Ala Gly  
 85 90 95  
 Ala Arg Lys Val Ile Gly Ile Glu Cys Ser Ser Ile Ser Asp Tyr Ala  
 100 105 110  
 Val Lys Ile Val Lys Ala Asn Lys Leu Asp His Val Val Thr Ile Ile  
 115 120 125  
 Lys Gly Lys Val Glu Glu Val Glu Leu Pro Val Glu Lys Val Asp Ile  
 130 135 140  
 Ile Ile Ser Glu Trp Met Gly Tyr Cys Leu Phe Tyr Glu Ser Met Leu  
 145 150 155 160  
 Asn Thr Val Leu Tyr Ala Arg Asp Lys Trp Leu Ala Pro Asp Gly Leu  
 165 170 175  
 Ile Phe Pro Asp Arg Ala Thr Leu Tyr Val Thr Ala Ile Glu Asp Arg  
 180 185 190  
 Gln Tyr Lys Asp Tyr Lys Ile His Trp Trp Glu Asn Val Tyr Gly Phe  
 195 200 205  
 Asp Met Ser Cys Ile Lys Asp Val Ala Ile Lys Glu Pro Leu Val Asp  
 210 215 220  
 Val Val Asp Pro Lys Gln Leu Val Thr Asn Ala Cys Leu Ile Lys Glu  
 225 230 235 240  
 Val Asp Ile Tyr Thr Val Lys Val Glu Asp Leu Thr Phe Thr Ser Pro  
 245 250 255  
 Phe Cys Leu Gln Val Lys Arg Asn Asp Tyr Val His Ala Leu Val Ala  
 260 265 270  
 Tyr Phe Asn Ile Glu Phe Thr Arg Cys His Lys Arg Thr Gly Phe Ser  
 275 280 285

Thr Ser Pro Glu Ser Pro Tyr Thr His Trp Lys Gln Thr Val Phe Tyr  
290 295 300

Met Glu Asp Tyr Leu Thr Val Lys Thr Gly Glu Glu Ile Phe Gly Thr  
305 310 315 320

Ile Gly Met Arg Pro Asn Ala Lys Asn Asn Arg Asp Leu Asp Phe Thr  
325 330 335

Ile Asp Leu Asp Phe Lys Gly Gln Leu Cys Glu Leu Ser Cys Ser Thr  
340 345 350

Asp Tyr Arg Met Arg  
355

<210> 971

<211> 176

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (176)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 971

Gly Val Pro Arg Arg Ala Tyr Gln Ala Xaa Xaa Leu Arg Arg Val Asp  
1 5 10 15

Asp Phe Lys Lys Ala Phe Ser Lys Glu Lys Met Glu Lys Thr Lys Val  
20 25 30

Arg Thr Arg Glu Asn Leu Glu Lys Thr Arg Leu Lys Thr Lys Glu Asn  
35 40 45

Leu Glu Lys Thr Arg His Thr Leu Glu Lys Arg Met Asn Lys Leu Gly  
50 55 60

933

Thr Arg Leu Val Pro Ala Glu Arg Arg Glu Lys Leu Lys Thr Ser Arg  
65 70 75 80  
Asp Lys Leu Arg Lys Ser Phe Thr Pro Asp His Val Val Tyr Ala Arg  
85 90 95  
Ser Lys Thr Ala Val Tyr Lys Val Pro Phe Thr Phe His Val Lys  
100 105 110  
Lys Ile Arg Glu Gly Gln Val Glu Val Leu Lys Ala Thr Glu Met Val  
115 120 125  
Glu Val Gly Ala Asp Asp Asp Glu Gly Gly Ala Glu Arg Gly Glu Ala  
130 135 140  
Gly Asp Leu Arg Arg Gly Ser Ser Pro Asp Val His Ala Leu Leu Glu  
145 150 155 160  
Ile Thr Glu Glu Ser Asp Ala Val Leu Val Asp Lys Ser Asp Ser Xaa  
165 170 175

&lt;210&gt; 972

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 972

Gly Lys Ala Arg Arg Arg Ala Ala Lys Leu Gln Ser Ser Gln Glu Pro  
1 5 10 15  
Glu Ala Pro Pro Pro Arg Asp Val Ala Leu Leu Gln Gly Arg Ala Asn  
20 25 30  
Asp Leu Val Lys Tyr Leu Leu Ala Lys Asp Gln Thr Lys Ile Pro Ile  
35 40 45  
Lys Arg Ser Asp Met Leu Lys Asp Ile Ile Lys Glu Tyr Thr Asp Val  
50 55 60  
Tyr Pro Glu Ile Ile Glu Arg Ala Gly Tyr Ser Leu Glu Lys Val Phe  
65 70 75 80  
Gly Ile Gln Leu Lys Glu Ile Asp Lys Asn Asp His Leu Tyr Ile Leu  
85 90 95  
Leu Ser Thr Leu Glu Pro Thr Asp Ala Gly Ile Leu Gly Thr Thr Lys

934

100 105 110

Asp Ser Pro Lys Leu Gly Leu Leu Met Val Leu Leu Ser Ile Ile Phe  
115 120 125

Met Asn Gly Asn Arg Ser Ser Glu Ala Val Ile Trp Glu Val Leu Arg  
130 135 140

Lys Leu Gly Leu Arg Leu Gly Tyr Ile Ile His Ser Leu Gly Thr  
145 150 155

&lt;210&gt; 973

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 973

Arg Ala Xaa Lys Ala Ala Pro Arg Arg Ala Leu Ala Arg Leu Val Leu  
1 5 10 15

Ala Trp Cys Arg Trp Leu Val Ser Ala Thr Cys Val Gly Thr Ala Asp  
20 25 30

Arg Lys Met Ser Ser Gly Asn Ala Lys Ile Gly His Pro Ala Pro Asn  
35 40 45

Phe Lys Ala Thr Ala Val Met Pro Asp Gly Gln Phe Lys Asp Ile Ser  
50 55 60

Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val Phe Phe Phe Tyr Pro Leu  
65 70 75 80

Asp Phe Thr Phe Val Cys Pro Thr Glu Ile Ile Ala Phe Ser Asp Arg  
85 90 95

Ala Glu Glu Phe Lys Lys Leu Asn Cys Gln Val Ile Gly Ala Ser Val  
100 105 110

Asp Ser His Phe Cys His Leu Ala Trp Val Asn Thr Pro Lys Lys Gln  
115 120 125

Gly Gly Leu Gly Pro Met Asn Ile Pro Leu Val Ser Asp Pro Lys Arg  
130 135 140



935

Thr Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly Ile Ser  
145 150 155 160

Phe Arg Gly Leu Phe Ile Ile Asp Asp Lys Gly Ile Leu Arg Gln Ile  
165 170 175

Thr Val Asn Asp Leu Pro Val Gly Arg Ser Val Asp Glu Thr Leu Arg  
180 185 190

Leu Val Gln Ala Phe Gln Phe Thr Asp Lys His Gly Glu Val Cys Pro  
195 200 205

Ala Gly Trp Lys Pro Gly Ser Asp Thr Ile Lys Pro Asp Val Gln Lys  
210 215 220

Ser Lys Glu Tyr Phe Ser Lys Gln Lys  
225 230

<210> 974

<211> 174

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 974

Ser Trp Asp Arg Arg Leu Met Gln Asp Asp Asn Arg Gly Leu Gly Gln  
1 5 10 15

Gly Leu Lys Asp Asn Lys Arg Thr Cys Asn Arg Phe Arg Leu Leu Leu  
20 25 30

Glu Arg Arg Thr xaa Gly Ser Glu Val Gln Asp Ser His Ser Thr Ser  
35 40 45

Tyr Pro Ser Leu Leu Ser His Leu Thr Ser Met Tyr Leu Asn Ala Pro  
50 55 60

Ala Leu Ala Leu Pro Val Ala Arg Met Gln Leu Pro Gly Pro Gly Leu  
65 70 75 80

Arg Ser Phe His Pro Leu Ala Ser Ser Leu Pro Cys Asp Phe His Leu  
85 90 95

Leu Asn Leu Arg Thr Leu Gln Ala Glu Glu Asp Thr Leu Pro Ser Ala  
100 105 110

936

Glu Thr Ala Leu Ile Leu His Arg Lys Val Leu Thr Ala Ala Trp Arg  
 115 120 125

Gln Glu Leu Gly Leu Gln Leu His His Lys Pro Arg Gln Gly Ser Pro  
 130 135 140

Gly Gln Pro Phe Pro Trp Pro Gly Cys Gly Ile Pro Ser Ala Asn Leu  
 145 150 155 160

Leu Asp Val Thr Val Pro Ser Gly Leu Pro Val Gln Gln His  
 165 170

<210> 975

<211> 380

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (134)

<223> Xaa equals any of the naturally occurring L-amino acids.

<400> 975

Arg Pro Glu Val Arg His Ser Arg Glu Ala Pro Glu Ser Arg Arg Trp  
 1 5 10 15

Ala Val Trp Arg Ser Leu Glu Ser Leu Pro Arg His Gln Leu Leu Cys  
 20 25 30

Leu Pro Val Gly Ala Pro Pro Ala Pro Ala Met Leu Ser Ala Leu Ala  
 35 40 45

Arg Pro Ala Ser Ala Ala Leu Arg Arg Ser Phe Ser Thr Ser Ala Gln  
 50 55 60

Asn Asn Ala Lys Val Ala Val Leu Gly Ala Ser Gly Gly Ile Gly Gln  
 65 70 75 80

Pro Leu Ser Leu Leu Leu Lys Asn Ser Pro Leu Val Ser Arg Leu Thr  
 85 90 95

Leu Tyr Asp Ile Ala His Thr Pro Gly Val Ala Ala Asp Leu Ser His  
 100 105 110

Ile Glu Thr Lys Ala Ala Val Lys Gly Tyr Leu Gly Pro Glu Gln Leu  
 115 120 125

Pro Asp Cys Leu Lys Xaa Cys Asp Val Val Val Ile Pro Ala Gly Val

937

130	135	140
Pro Arg Lys Pro Gly Met Thr Arg Asp Asp Leu Phe Asn Thr Asn Ala		
145	150	155 160
Thr Ile Val Ala Thr Leu Thr Ala Ala Cys Ala Gln His Cys Pro Glu		
	165	170 175
Ala Met Ile Cys Val Ile Ala Asn Pro Val Asn Ser Thr Ile Pro Ile		
	180	185 190
Thr Ala Glu Val Phe Lys Lys His Gly Val Tyr Asn Pro Asn Lys Ile		
	195	200 205
Phe Gly Val Thr Thr Leu Asp Ile Val Arg Ala Asn Thr Phe Val Ala		
	210	215 220
Glu Leu Lys Gly Leu Asp Pro Ala Arg Val Asn Val Pro Val Ile Gly		
	225	230 235 240
Gly His Ala Gly Lys Thr Ile Ile Pro Leu Ile Ser Gln Cys Thr Pro		
	245	250 255
Lys Val Asp Phe Pro Gln Asp Gln Leu Thr Ala Leu Thr Gly Arg Ile		
	260	265 270
Gln Glu Ala Gly Thr Glu Val Val Lys Ala Lys Ala Gly Ala Gly Ser		
	275	280 285
Ala Thr Leu Ser Met Ala Tyr Ala Gly Ala Arg Phe Val Phe Ser Leu		
	290	295 300
Val Asp Ala Met Asn Gly Lys Glu Gly Val Val Glu Cys Ser Phe Val		
	305	310 315 320
Lys Ser Gln Glu Thr Glu Cys Thr Tyr Phe Ser Thr Pro Leu Leu Leu		
	325	330 335
Gly Lys Lys Gly Ile Glu Lys Asn Leu Gly Ile Gly Lys Val Ser Ser		
	340	345 350
Phe Glu Glu Lys Met Ile Ser Asp Ala Ile Pro Glu Leu Lys Ala Ser		
	355	360 365
Ile Lys Lys Gly Glu Asp Phe Val Lys Thr Leu Lys		
	370	375 380

&lt;210&gt; 976

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 976

Ala Ala Leu Ser Gln Ile Thr Ile Ala Thr Pro Pro Ala Val Lys Gln  
 1 5 10 15  
 Thr Ile Ser Asn Ile Ser Gly Phe Asn Glu Thr Cys Leu Arg Trp Arg  
 20 25 30  
 Ser Ile Lys Thr Ala Asp Met Glu Glu Met Tyr Leu Phe His Ile Trp  
 35 40 45  
 Gly Gln Arg Trp Tyr Gln Lys Glu Phe Ala Gln Glu Met Thr Phe Asn  
 50 55 60  
 Ile Ser Ser Ser Ser Arg Asp Pro Glu Val Cys Leu Asp Leu Arg Pro  
 65 70 75 80  
 Gly Thr Asn Tyr Asn Val Ser Leu Arg Ala Leu Ser Ser Glu Leu Pro  
 85 90 95  
 Val Val Ile Ser Leu Thr Thr Gln Ile Thr Glu Pro Pro Leu Pro Glu  
 100 105 110  
 Val Glu Phe Phe Thr Val His Arg Gly Pro Leu Pro Arg Leu Arg Leu  
 115 120 125  
 Arg Lys Ala Lys Glu Lys Asn Gly Pro Ile Ser Ser Tyr Gln Val Leu  
 130 135 140  
 Val Leu Pro Leu Ala Leu Gln Ser Thr Phe Ser Cys Asp Ser Glu Gly  
 145 150 155 160  
 Ala Ser Ser Phe Phe Ser Asn Ala Ser Asp Ala Asp Gly Tyr Val Ala  
 165 170 175  
 Ala Glu Leu Leu Ala Lys Asp Val Pro Asp Asp Ala Met Glu Ile Pro  
 180 185 190  
 Ile Gly Asp Arg Leu Tyr Tyr Gly Glu Tyr Tyr Asn Ala Pro Leu Lys  
 195 200 205  
 Arg Gly Ser Asp Tyr Cys Ile Ile Leu Arg Ile Thr Ser Glu Trp Asn  
 210 215 220  
 Lys Val Arg Arg His Ser Cys Ala Val Trp Ala Gln Val Lys Asp Ser  
 225 230 235 240  
 Ser Leu Met Leu Leu Gln Met Ala Gly Val Gly Leu Gly Ser Leu Ala  
 245 250 255

Val Val Ile Ile Leu Thr Phe Leu Ser Phe Ser Ala Val  
 260 265

<210> 977  
 <211> 477  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (471)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (473)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 977  
 Leu Phe Ser Pro Gln Val Glu Leu Thr Lys Ala Met Val Met Glu Lys  
 1 5 10 15

Pro Ser Pro Leu Leu Val Gly Arg Glu Phe Val Arg Gln Tyr Tyr Thr  
 20 25 30

Leu Leu Asn Gln Ala Pro Asp Met Leu His Arg Phe Tyr Gly Lys Asn  
 35 40 45

Ser Ser Tyr Val His Gly Gly Leu Asp Ser Asn Gly Lys Pro Ala Asp  
 50 55 60

Ala Val Tyr Gly Gln Lys Glu Ile His Arg Lys Val Met Ser Gln Asn  
 65 70 75 80

Phe Thr Asn Cys His Thr Lys Ile Arg His Val Asp Ala His Ala Thr  
 85 90 95

Leu Asn Asp Gly Val Val Val Gln Val Met Gly Leu Leu Ser Asn Asn  
 100 105 110

Asn Gln Ala Leu Arg Arg Phe Met Gln Thr Phe Val Leu Ala Pro Glu  
 115 120 125

Gly Ser Val Ala Asn Lys Phe Tyr Val His Asn Asp Ile Phe Arg Tyr  
 130 135 140

Gln Asp Glu Val Phe Gly Gly Phe Val Thr Glu Pro Gln Glu Glu Ser  
 145 150 155 160

940

Glu Glu Glu Val Glu Glu Pro Glu Glu Arg Gln Gln Thr Pro Glu Val  
 165 170 175  
 Val Pro Asp Asp Ser Gly Thr Phe Tyr Asp Gln Ala Val Val Ser Asn  
 180 185 190  
 Asp Met Glu Glu His Leu Glu Glu Pro Val Ala Glu Pro Glu Pro Asp  
 195 200 205  
 Pro Glu Pro Glu Pro Glu Gln Glu Pro Val Ser Glu Ile Gln Glu Glu  
 210 215 220  
 Lys Pro Glu Pro Val Leu Glu Glu Thr Ala Pro Glu Asp Ala Gln Lys  
 225 230 235 240  
 Ser Ser Ser Pro Ala Pro Ala Asp Ile Ala Gln Thr Val Gln Glu Asp  
 245 250 255  
 Leu Arg Thr Phe Ser Trp Ala Ser Val Thr Ser Lys Asn Leu Pro Pro  
 260 265 270  
 Ser Gly Ala Val Pro Val Thr Gly Ile Pro Pro His Val Val Lys Val  
 275 280 285  
 Pro Ala Ser Gln Pro Arg Pro Glu Ser Lys Pro Glu Ser Gln Ile Pro  
 290 295 300  
 Pro Gln Arg Pro Gln Arg Asp Gln Arg Val Arg Glu Gln Arg Ile Asn  
 305 310 315 320  
 Ile Pro Pro Gln Arg Gly Pro Arg Pro Ile Arg Glu Ala Gly Glu Gln  
 325 330 335  
 Gly Asp Ile Glu Pro Arg Arg Met Val Arg His Pro Asp Ser His Gln  
 340 345 350  
 Leu Phe Ile Gly Asn Leu Pro His Glu Val Asp Lys Ser Glu Leu Lys  
 355 360 365  
 Asp Phe Phe Gln Ser Tyr Gly Asn Val Val Glu Leu Arg Ile Asn Ser  
 370 375 380  
 Gly Gly Lys Leu Pro Asn Phe Gly Phe Val Val Phe Asp Asp Ser Glu  
 385 390 395 400  
 Pro Val Gln Lys Val Leu Ser Asn Arg Pro Ile Met Phe Arg Gly Glu  
 405 410 415  
 Val Arg Leu Asn Val Glu Glu Lys Lys Thr Arg Ala Ala Arg Glu Gly  
 420 425 430

Asp Arg Arg Asp Asn Arg Leu Arg Gly Pro Gly Gly Pro Arg Gly Gly  
 435 440 445

Leu Gly Gly Gly Met Arg Gly Pro Pro Arg Gly Gly Met Val Gln Lys  
 450 455 460

Pro Gly Phe Gly Val Gly Xaa Gly Xaa Ala Pro Arg Gln  
 465 470 475

<210> 978

<211> 339

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (128)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (326)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (336)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (339)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 978

Pro Val Ala Ala Val Ser Gly Arg Ala Val Gly Gly Ser Arg Gly Gly  
 1 5 10 15

Gly Arg Gly Gly Met Ala Ala Ala Ala Gly Ala Gly Ser Gly Pro  
 20 25 30

Trp Ala Ala Gln Glu Lys Gln Phe Pro Pro Ala Leu Leu Ser Phe Phe  
 35 40 45

Ile Tyr Asn Pro Arg Phe Gly Pro Arg Glu Gly Gln Glu Glu Asn Lys  
 50 55 60

Ile Leu Phe Tyr His Pro Asn Glu Val Glu Lys Asn Glu Lys Ile Arg

942

65		70		75		80
Asn Val Gly Leu Cys Glu Ala Ile Val Gln Phe Thr Arg Thr Phe Ser						
	85		90		95	
Pro Ser Lys Pro Ala Lys Ser Leu His Thr Gln Lys Asn Arg Gln Phe						
	100		105		110	
Phe Asn Glu Pro Glu Glu Asn Phe Trp Met Val Met Val Val Arg Xaa						
	115		120		125	
Pro Ile Ile Glu Lys Gln Ser Lys Asp Gly Lys Pro Val Ile Glu Tyr						
	130		135		140	
Gln Glu Glu Glu Leu Leu Asp Lys Val Tyr Ser Ser Val Leu Arg Gln						
	145		150		155	160
Cys Tyr Ser Met Tyr Lys Leu Phe Asn Gly Thr Phe Leu Lys Ala Met						
	165		170		175	
Glu Asp Gly Gly Val Lys Leu Leu Lys Glu Arg Leu Glu Lys Phe Phe						
	180		185		190	
His Arg Tyr Leu Gln Thr Leu His Leu Gln Ser Cys Asp Leu Leu Asp						
	195		200		205	
Ile Phe Gly Gly Ile Ser Phe Phe Pro Leu Asp Lys Met Thr Tyr Leu						
	210		215		220	
Lys Ile Gln Ser Phe Ile Asn Arg Met Glu Glu Ser Leu Asn Ile Val						
	225		230		235	240
Lys Tyr Thr Ala Phe Leu Tyr Asn Asp Gln Leu Ile Trp Ser Gly Leu						
	245		250		255	
Glu Gln Asp Asp Met Arg Ile Leu Tyr Lys Tyr Leu Thr Thr Ser Leu						
	260		265		270	
Phe Pro Arg His Ile Glu Pro Glu Leu Ala Gly Arg Asp Ser Pro Ile						
	275		280		285	
Arg Ala Glu Met Pro Gly Asn Leu Gln His Tyr Gly Arg Phe Leu Thr						
	290		295		300	
Gly Pro Leu Asn Leu Asn Asp Pro Asp Ala Lys Cys Arg Phe Pro Lys						
	305		310		315	320
Ile Phe Val Asn Thr Xaa Asp Thr Tyr Glu Glu Leu His Leu Ile Xaa						
	325		330		335	
Tyr Lys Xaa						



943

&lt;210&gt; 979

&lt;211&gt; 283

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 979

His Arg Glu Arg Arg Val Gly Leu Arg Cys Ala Arg Arg Thr Ser Glu  
 1 5 10 15

Ala Ala Gly Ser Gly Ala Gly Pro Pro Gly Pro Leu Gln Gly Arg Ser  
 20 25 30

Gly Ser Ser Trp Ala Pro Arg Pro Gly Arg Arg Thr Glu Glu Arg Arg  
 35 40 45

Lys Gly Ala Gly Gly Thr Arg Pro Arg Pro Ala Ala Ala Met Asn Ser  
 50 55 60

Asn Val Glu Asn Leu Pro Pro His Ile Ile Arg Leu Val Tyr Lys Glu  
 65 70 75 80

Val Thr Thr Leu Thr Ala Asp Pro Pro Asp Gly Ile Lys Val Phe Pro  
 85 90 95

Asn Glu Glu Asp Leu Thr Asp Leu Gln Val Thr Ile Glu Gly Pro Glu  
 100 105 110

Gly Thr Pro Tyr Ala Gly Gly Leu Phe Arg Met Lys Leu Leu Leu Gly  
 115 120 125

Lys Asp Phe Pro Ala Ser Pro Pro Lys Gly Tyr Phe Leu Thr Lys Ile  
 130 135 140

Phe His Pro Asn Val Gly Ala Asn Gly Glu Ile Cys Val Asn Val Leu  
 145 150 155 160

Lys Arg Asp Trp Thr Ala Glu Leu Gly Ile Arg His Val Leu Leu Thr  
 165 170 175

Ile Lys Cys Leu Leu Ile His Pro Asn Pro Glu Ser Ala Leu Asn Glu  
 180 185 190

Glu Ala Gly Arg Leu Leu Leu Glu Asn Tyr Glu Glu Tyr Ala Ala Arg  
 195 200 205

Ala Arg Leu Leu Thr Glu Ile His Gly Gly Ala Gly Gly Pro Ser Gly  
 210 215 220

Arg Ala Glu Ala Gly Arg Ala Leu Ala Ser Gly Thr Glu Ala Ser Ser  
225 230 235 240

Thr Asp Pro Gly Ala Pro Gly Gly Pro Gly Gly Ala Glu Gly Pro Met  
245 250 255

Ala Lys Lys His Ala Gly Glu Arg Asp Lys Lys Leu Ala Ala Lys Lys  
260 265 270

Lys Thr Asp Lys Lys Arg Ala Leu Arg Arg Leu  
275 280

<210> 980

<211> 353

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (333)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (346)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 980

Arg Lys Gln Cys Gln Asp Ser Lys Asp Ser Asn His Leu Pro Lys Met  
5 10 15

Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr Ser  
20 25 30

Gly Gln Tyr Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln Ser  
35 40 45

Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro Ser  
50 55 60

Ala Met Tyr Cys Asp Glu Leu Lys Leu Lys Ser Val Pro Met Val Pro  
65 70 75 80

Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His Ile  
85 90 95

Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile Leu  
100 105 110

945

Asp His Asn Leu Leu Glu Asn Ser Lys Ile Lys Gly Arg Val Phe Ser  
115 120 125

Lys Leu Lys Gln Leu Lys Lys Leu His Ile Asn His Asn Asn Leu Thr  
130 135 140

Glu Ser Val Gly Pro Leu Pro Lys Ser Leu Glu Asp Leu Gln Leu Thr  
145 150 155 160

His Asn Lys Ile Thr Lys Leu Gly Ser Phe Glu Gly Leu Val Asn Leu  
165 170 175

Thr Phe Ile His Leu Gln His Asn Arg Leu Lys Glu Asp Ala Val Ser  
180 185 190

Ala Ala Phe Lys Gly Leu Lys Ser Leu Glu Tyr Leu Asp Leu Ser Phe  
195 200 205

Asn Gln Ile Ala Arg Leu Pro Ser Gly Leu Pro Val Ser Leu Leu Thr  
210 215 220

Leu Tyr Leu Asp Asn Asn Lys Ile Ser Asn Ile Pro Asp Glu Tyr Phe  
225 230 235 240

Lys Arg Phe Asn Ala Leu Gln Tyr Leu Arg Leu Ser His Asn Glu Leu  
245 250 255

Ala Asp Ser Gly Ile Pro Gly Asn Ser Phe Asn Val Ser Ser Leu Val  
260 265 270

Glu Leu Asp Leu Ser Tyr Asn Lys Leu Lys Asn Ile Pro Thr Val Asn  
275 280 285

Glu Asn Leu Glu Asn Tyr Tyr Leu Glu Val Asn Gln Leu Glu Lys Phe  
290 295 300

Asp Ile Lys Ser Phe Cys Lys Ile Leu Gly Pro Leu Ser Tyr Ser Lys  
305 310 315 320

Ile Lys His Leu Arg Leu Asp Gly Asn Arg Ile Ser Xaa Thr Ser Leu  
325 330 335

Pro Pro Asp Met Tyr Glu Cys Leu Arg Xaa Ala Asn Glu Val Thr Leu  
340 345 350

Asn

946

<210> 981  
 <211> 343  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (343)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 981

Asn	Leu	Thr	Lys	Asn	Met	Thr	Ala	Leu	Ser	Ser	Glu	Asn	Cys	Ser	Phe
1				5					10					15	
Gln	Tyr	Gln	Leu	Arg	Gln	Thr	Asn	Gln	Pro	Leu	Asp	Val	Asn	Tyr	Leu
			20					25						30	
Leu	Phe	Leu	Ile	Ile	Leu	Gly	Lys	Ile	Leu	Leu	Asn	Ile	Leu	Thr	Leu
		35					40					45			
Gly	Met	Arg	Arg	Lys	Asn	Thr	Cys	Gln	Asn	Phe	Met	Glu	Tyr	Phe	Cys
	50					55					60				
Ile	Ser	Leu	Ala	Phe	Val	Asp	Leu	Leu	Leu	Leu	Val	Asn	Ile	Ser	Ile
	65				70					75					80
Ile	Leu	Tyr	Phe	Arg	Asp	Phe	Val	Leu	Leu	Ser	Ile	Arg	Phe	Thr	Lys
				85					90					95	
Tyr	His	Ile	Cys	Leu	Phe	Thr	Gln	Ile	Ile	Ser	Phe	Thr	Tyr	Gly	Phe
			100					105						110	
Leu	His	Tyr	Pro	Val	Phe	Leu	Thr	Ala	Cys	Ile	Asp	Tyr	Cys	Leu	Asn
		115					120					125			
Phe	Ser	Lys	Thr	Thr	Lys	Leu	Ser	Phe	Lys	Cys	Gln	Lys	Leu	Phe	Tyr
	130					135					140				
Phe	Phe	Thr	Val	Ile	Leu	Ile	Trp	Ile	Ser	Val	Leu	Ala	Tyr	Val	Leu
	145				150					155					160
Gly	Asp	Pro	Ala	Ile	Tyr	Gln	Ser	Leu	Lys	Ala	Gln	Asn	Ala	Tyr	Ser
				165					170					175	
Arg	His	Cys	Pro	Phe	Tyr	Val	Ser	Ile	Gln	Ser	Tyr	Trp	Leu	Ser	Phe
			180					185					190		
Phe	Met	Val	Met	Ile	Leu	Phe	Val	Ala	Phe	Ile	Thr	Cys	Trp	Glu	Glu
	195						200					205			
Val	Thr	Thr	Leu	Val	Gln	Ala	Ile	Arg	Ile	Thr	Ser	Tyr	Met	Asn	Glu

947

210	215	220
Thr Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg		
225	230	235 240
Ser Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr		
	245	250 255
Trp Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val		
	260	265 270
Gln Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val		
	275	280 285
Asn Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu		
	290	295 300
Asn Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys		
	305	310 315 320
Cys Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys		
	325	330 335
Pro Ile Ser Ile Met Ile Xaa		
	340	

<210> 982  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (108)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (111)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (114)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (121)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (122)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (126)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (127)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (132)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 982

Gly Leu Pro Pro Ser Thr Phe Leu His Ser Ala Val Ser Thr Leu Pro  
1 5 10 15

His Arg Pro Ser Pro Pro Ser Leu Leu Pro Ala Pro Cys Lys Pro Leu  
20 25 30

Arg Leu Gly Leu Ala Thr Val Pro Ala Gly Ser Pro Gly Leu Gly Val  
35 40 45

Gly Asp Ser Leu Gln Ala Arg Ser Pro Glu Thr Ser Glu Gly His Pro  
50 55 60

Leu Arg Val Ala Arg Pro Pro Val Ala Asn Leu Ser Ala Ala Ser Ala  
65 70 75 80

Thr Ser Pro Ala Gly Pro Trp Phe Arg Trp Pro Pro Arg Cys Leu Ala  
85 90 95

Glu Thr Arg His Gly Pro Ser Ala Gly Pro His Xaa Phe Pro Xaa Pro  
100 105 110

Gly Xaa Trp His Cys Ser Arg Gln Xaa Xaa Gly His Gln Xaa Xaa Asn  
115 120 125

Arg Thr Gln Xaa Pro Ala Gln Thr Ala Ala Gly Met Gly Ala  
130 135 140

949

<210> 983  
 <211> 193  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (72)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (135)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (139)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 983

Val	Asn	Phe	Lys	Ala	Phe	Glu	Met	Gly	Lys	Asp	Tyr	Tyr	Cys	Ile	Leu
1				5					10					15	
Gly	Ile	Glu	Lys	Gly	Ala	Ser	Asp	Glu	Asp	Ile	Lys	Lys	Ala	Tyr	Arg
			20					25					30		
Lys	Gln	Ala	Leu	Lys	Phe	His	Pro	Asp	Lys	Asn	Lys	Ser	Pro	Gln	Ala
		35					40					45			
Glu	Glu	Lys	Phe	Lys	Glu	Val	Ala	Glu	Ala	Tyr	Glu	Val	Leu	Ser	Asp
	50					55					60				
Pro	Lys	Lys	Arg	Glu	Ile	Tyr	Xaa	Gln	Phe	Gly	Glu	Glu	Gly	Leu	Lys
65					70					75					80
Gly	Gly	Ala	Gly	Gly	Thr	Asp	Gly	Gln	Gly	Gly	Thr	Phe	Arg	Tyr	Thr
				85					90					95	
Phe	His	Gly	Asp	Pro	His	Ala	Thr	Phe	Ala	Ala	Phe	Phe	Gly	Gly	Ser
			100						105					110	
Asn	Pro	Phe	Glu	Ile	Phe	Phe	Gly	Arg	Arg	Met	Gly	Gly	Gly	Arg	Asp
		115					120					125			
Ser	Glu	Glu	Met	Glu	Ile	Xaa	Gly	Asp	Pro	Xaa	Ser	Ala	Phe	Gly	Phe
	130						135					140			
Ser	Met	Asn	Gly	Tyr	Pro	Arg	Asp	Arg	Asn	Ser	Val	Gly	Pro	Ser	Arg
145					150					155					160

950

Leu Lys Gln Asp Pro Pro Val Ile His Glu Leu Arg Val Ser Leu Glu  
 165 170 175  
 Glu Ile Tyr Ser Gly Cys Thr Lys Arg Asp Glu Arg Phe Leu Glu Lys  
 180 185 190  
 Gly

<210> 984  
 <211> 402  
 <212> PRT  
 <213> Homo sapiens

<400> 984  
 Lys Ser Tyr Glu Met Glu Leu Glu Gly Lys Ala Gly Ser Gly Leu  
 1 5 10 15

Arg Gln Tyr Tyr Leu Ser Lys Ile Glu Glu Leu Gln Leu Ile Val Asn  
 20 25 30

Asp Lys Ser Gln Asn Leu Arg Arg Leu Gln Ala Gln Arg Asn Glu Leu  
 35 40 45

Asn Ala Lys Val Arg Leu Leu Arg Glu Glu Leu Gln Leu Leu Gln Glu  
 50 55 60

Gln Gly Ser Tyr Val Gly Glu Val Val Arg Ala Met Asp Lys Lys Lys  
 65 70 75 80

Val Leu Val Lys Val His Pro Glu Gly Lys Phe Val Val Asp Val Asp  
 85 90 95

Lys Asn Ile Asp Ile Asn Asp Val Thr Pro Asn Cys Arg Val Ala Leu  
 100 105 110

Arg Asn Asp Ser Tyr Thr Leu His Lys Ile Leu Pro Asn Lys Val Asp  
 115 120 125

Pro Leu Val Ser Leu Met Met Val Glu Lys Val Pro Asp Ser Thr Tyr  
 130 135 140

Glu Met Ile Gly Gly Leu Asp Lys Gln Ile Lys Glu Ile Lys Glu Val  
 145 150 155 160

Ile Glu Leu Pro Val Lys His Pro Glu Leu Phe Glu Ala Leu Gly Ile  
 165 170 175



951

Ala Gln Pro Lys Gly Val Leu Leu Tyr Gly Pro Pro Gly Thr Gly Lys  
                   180                                  185                                  190

Thr Leu Leu Ala Arg Ala Val Ala His His Thr Asp Cys Thr Phe Ile  
                   195                                  200                                  205

Arg Val Ser Gly Ser Glu Leu Val Gln Lys Phe Ile Gly Glu Gly Ala  
                   210                                  215                                  220

Arg Met Val Arg Glu Leu Phe Val Met Ala Arg Glu His Ala Pro Ser  
                   225                                  230                                  235                                  240

Ile Ile Phe Met Asp Glu Ile Asp Ser Ile Gly Ser Ser Arg Leu Glu  
                                   245                                  250                                  255

Gly Gly Ser Gly Gly Asp Ser Glu Val Gln Arg Thr Met Leu Glu Leu  
                                   260                                  265                                  270

Leu Asn Gln Leu Asp Gly Phe Glu Ala Thr Lys Asn Ile Lys Val Ile  
                   275                                  280                                  285

Met Ala Thr Asn Arg Ile Asp Ile Leu Asp Ser Ala Leu Leu Arg Pro  
                   290                                  295                                  300

Gly Arg Ile Asp Arg Lys Ile Glu Phe Pro Pro Pro Asn Glu Glu Ala  
                   305                                  310                                  315                                  320

Arg Leu Asp Ile Leu Lys Ile His Ser Arg Lys Met Asn Leu Thr Arg  
                                   325                                  330                                  335

Gly Ile Asn Leu Arg Lys Ile Ala Glu Leu Met Pro Gly Ala Ser Gly  
                                   340                                  345                                  350

Ala Glu Val Lys Gly Val Cys Thr Glu Ala Gly Met Tyr Ala Leu Arg  
                   355                                  360                                  365

Glu Arg Arg Val His Val Thr Gln Glu Asp Phe Glu Met Ala Val Ala  
                   370                                  375                                  380

Lys Val Met Gln Lys Asp Ser Glu Lys Asn Met Ser Ile Lys Lys Leu  
                   385                                  390                                  395                                  400

Trp Lys

&lt;210&gt; 985

&lt;211&gt; 347

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 985

Arg Arg Arg Arg Trp His Pro Gly Pro Gly Gly Pro Arg Arg Thr Ala  
 1 5 10 15  
 Gly Lys Gly Pro Arg Lys Val Ala Ser Ala Ser Ala Ala Ser Thr  
 20 25 30  
 Leu Ser Glu Pro Pro Arg Arg Thr Gln Glu Ser Arg Thr Arg Thr Arg  
 35 40 45  
 Ala Leu Gly Leu Pro Thr Leu Pro Met Glu Lys Leu Ala Ala Ser Thr  
 50 55 60  
 Glu Pro Gln Gly Pro Arg Pro Val Leu Gly Arg Glu Ser Val Gln Val  
 65 70 75 80  
 Pro Asp Asp Gln Asp Phe Arg Ser Phe Arg Ser Glu Cys Glu Ala Glu  
 85 90 95  
 Val Gly Trp Asn Leu Thr Tyr Ser Arg Ala Gly Val Ser Val Trp Val  
 100 105 110  
 Gln Ala Val Glu Met Asp Arg Thr Leu His Lys Ile Lys Cys Arg Met  
 115 120 125  
 Glu Cys Cys Asp Val Pro Ala Glu Thr Leu Tyr Asp Val Leu His Asp  
 130 135 140  
 Ile Glu Tyr Arg Lys Lys Trp Asp Ser Asn Val Ile Glu Thr Phe Asp  
 145 150 155 160  
 Ile Ala Arg Leu Thr Val Asn Ala Asp Val Gly Tyr Tyr Ser Trp Arg  
 165 170 175  
 Cys Pro Lys Pro Leu Lys Asn Arg Asp Val Ile Thr Leu Arg Ser Trp  
 180 185 190  
 Leu Pro Met Gly Ala Asp Tyr Ile Ile Met Asn Tyr Ser Val Lys His  
 195 200 205  
 Pro Lys Tyr Pro Pro Arg Lys Asp Leu Val Arg Ala Val Ser Ile Gln  
 210 215 220  
 Thr Gly Tyr Leu Ile Gln Ser Thr Gly Pro Lys Ser Cys Val Ile Thr  
 225 230 235 240  
 Tyr Leu Ala Gln Val Asp Pro Lys Gly Ser Leu Pro Lys Trp Val Val  
 245 250 255  
 Asn Lys Ser Ser Gln Phe Leu Ala Pro Lys Ala Met Lys Lys Met Tyr

953

260                      265                      270  
 Lys Ala Cys Leu Lys Tyr Pro Glu Trp Lys Gln Lys His Leu Pro His  
       275                      280                      285  
 Phe Lys Pro Trp Leu His Pro Glu Gln Ser Pro Leu Pro Ser Leu Ala  
       290                      295                      300  
 Leu Ser Glu Leu Ser Val Gln His Ala Asp Ser Leu Glu Asn Ile Asp  
       305                      310                      315                      320  
 Glu Ser Ala Val Ala Glu Ser Arg Glu Glu Arg Met Gly Gly Ala Gly  
                              325                      330                      335  
 Gly Glu Gly Ser Asp Asp Asp Thr Ser Leu Thr  
                              340                      345  
  
 <210> 986  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (36)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 986  
 Ala Ser Ile Cys Ala Asp Ala Lys Leu Trp Thr Met Tyr Ala Arg Pro  
       1                      5                      10                      15  
 Ser Asn Arg Gln Arg Cys Leu Gly Ser Lys His Thr Glu Arg Thr Trp  
                              20                      25                      30  
 Thr Ala Trp Xaa Arg Ser Leu Ile Arg Pro Phe Ser Met His Ile Leu  
                              35                      40                      45  
 Pro Lys Gln Ser Gln Ile Pro Leu Lys Gly Ala Asp Ser Ile Ser Ser  
                              50                      55                      60  
 Ser Val Gln Thr Leu Arg Ala Glu Arg Ser Gly Ser Gly Ser His Val  
       65                      70                      75                      80  
 Thr Ala Gln Asn Asn Leu Arg Asn Pro Leu Cys Pro Glu Gly Ser Leu  
                              85                      90                      95  
 Thr Ser Pro Ser Gly Ser Glu Gln Ser Leu  
                              100                      105

<210> 987  
 <211> 172  
 <212> PRT  
 <213> Homo sapiens

<400> 987  
 Thr Pro Arg Gly Ala Val Lys Pro Ser Ala Asn Lys Tyr Pro Ile Phe  
 1 5 10 15  
 Phe Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe  
 20 25 30  
 Pro Tyr Lys Glu Tyr Lys Asp Lys Phe Gly Lys Ser Asn Lys Arg Lys  
 35 40 45  
 Gly Phe Asn Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Gly Val Lys  
 50 55 60  
 Phe Thr Gly Tyr Gln Ala Ile Gln Gln Gln Ser Ser Ser Glu Thr Glu  
 65 70 75 80  
 Gly Glu Gly Gly Asn Thr Ala Asp Ala Ser Ser Glu Glu Glu Gly Asp  
 85 90 95  
 Arg Val Glu Glu Asp Gly Lys Gly Lys Arg Lys Asn Glu Lys Ala Gly  
 100 105 110  
 Ser Lys Arg Lys Lys Ser Tyr Thr Ser Lys Lys Ser Ser Lys Gln Ser  
 115 120 125  
 Arg Lys Ser Pro Gly Asp Glu Asp Asp Lys Asp Cys Lys Glu Glu Glu  
 130 135 140  
 Asn Lys Ser Ser Ser Glu Gly Gly Asp Ala Gly Asn Asp Thr Arg Asn  
 145 150 155 160  
 Thr Thr Ser Asp Leu Gln Lys Thr Ser Glu Gly Thr  
 165 170

<210> 988  
 <211> 238  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (146)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 988

Ala	Lys	Gln	Asp	Pro	Val	Pro	Glu	Gln	Glu	Met	Ser	Pro	Ser	Ile	Ser	1	5	10	15
Asp	Pro	Cys	Leu	Gly	Gln	Ala	Leu	Met	Gly	Gly	Pro	Ser	Phe	Lys	Ala	20	25	30	
Val	Val	Gly	Thr	Ala	Pro	Pro	Asn	Ala	Ser	Leu	Ser	Phe	Leu	Pro	Ile	35	40	45	
His	Gln	Tyr	Thr	Ala	Gly	Pro	Phe	Leu	Val	Phe	Val	Gln	Gln	Glu	Thr	50	55	60	
His	Phe	Trp	Trp	Asp	Met	Pro	Ser	Ser	Ala	Thr	Gly	Pro	Leu	Thr	Pro	65	70	75	80
Cys	Ile	Ser	Val	Leu	Pro	Val	Ser	Ala	Gly	Thr	Asp	Ser	Lys	Gly	Lys	85	90	95	
Pro	Ser	Val	Trp	Xaa	Ile	Gly	Gly	Trp	Glu	Gln	Arg	Gly	Glu	Asn	Ala	100	105	110	
Val	Leu	Ser	Phe	Cys	Leu	Gly	Ile	Pro	His	Thr	Thr	Trp	Val	Leu	Pro	115	120	125	
Gly	Lys	Pro	Val	Leu	Ser	Lys	Thr	Met	Asp	Leu	Ala	Ser	Pro	Thr	Gly	130	135	140	
Leu	Xaa	Ser	Gln	His	Leu	Arg	Glu	Gly	Gly	Trp	Lys	Arg	Leu	Cys	Pro	145	150	155	160
His	Phe	Glu	Leu	Gln	Ala	Gly	Ser	Ala	Ala	Leu	Lys	Pro	Ser	Ser	Asp	165	170	175	
Phe	Leu	Thr	Gln	Asp	Pro	Ala	Pro	Gly	Arg	Arg	Arg	Val	Gly	Ala	Gly	180	185	190	
Leu	Val	Gly	Gln	Lys	Glu	Ala	Ser	Ala	Gly	Leu	Glu	Asp	Pro	Ser	Ser	195	200	205	
Thr	Ser	His	Ser	Val	Ser	Ser	Ser	Trp	Glu	Asn	Leu	Cys	Gln	Ala	Arg	210	215	220	
Ala	Val	Ile	Gly	Pro	His	Glu	Val	Ser	Glu	Ala	Pro	Ser	Trp						

956

225

230

235

&lt;210&gt; 989

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 989

Ser Leu Ile Lys Ala Leu Tyr Ile Leu Tyr Gly Phe Arg His His His  
1 5 10 15

Thr Lys Lys Leu Thr Pro Ser Ile Pro Val Phe Val Gly Gln Ala Ser  
20 25 30

Phe Phe Ser Pro Cys Ser Val Ser His Thr Val Cys Leu Gln Lys Leu  
35 40 45

Leu Ile Gly Ala Lys Tyr Asn Cys Gln Tyr Asn Leu Lys Thr Thr Met  
50 55 60

Cys Pro Arg Arg Pro Thr Cys Leu Phe Pro  
65 70

&lt;210&gt; 990

&lt;211&gt; 295

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 990

Ala Pro Ala Arg Pro Gly Ser Leu Pro Ser Thr Arg Ser Ala Pro Leu  
1 5 10 15

Val Pro Ser Ser Arg Arg Arg Pro Ala Glu Ser Pro Leu Arg Ser Arg  
20 25 30

Arg Cys Arg Gly Asp Met Val Leu Cys Val Gln Gly Pro Arg Pro Leu  
35 40 45

Leu Ala Val Glu Arg Thr Gly Gln Arg Pro Leu Trp Ala Pro Ser Leu  
50 55 60

Glu Leu Pro Lys Pro Val Met Gln Pro Leu Pro Ala Gly Ala Phe Leu  
65 70 75 80

Glu Glu Val Ala Glu Gly Thr Pro Ala Gln Thr Glu Ser Glu Pro Lys  
85 90 95

Val Leu Asp Pro Glu Glu Asp Leu Leu Cys Ile Ala Lys Thr Phe Ser  
 100 105 110  
 Tyr Leu Arg Glu Ser Gly Trp Tyr Trp Gly Ser Ile Thr Ala Ser Glu  
 115 120 125  
 Ala Arg Gln His Leu Gln Lys Met Pro Glu Gly Thr Phe Leu Val Arg  
 130 135 140  
 Asp Ser Thr His Pro Ser Tyr Leu Phe Thr Leu Ser Val Lys Thr Thr  
 145 150 155 160  
 Arg Gly Pro Thr Asn Val Arg Ile Glu Tyr Ala Asp Ser Ser Phe Arg  
 165 170 175  
 Leu Asp Ser Asn Cys Leu Ser Arg Pro Arg Ile Leu Ala Phe Pro Asp  
 180 185 190  
 Val Val Ser Leu Val Gln His Tyr Val Ala Ser Cys Thr Ala Asp Thr  
 195 200 205  
 Arg Ser Asp Ser Pro Asp Pro Ala Pro Thr Pro Ala Leu Pro Met Pro  
 210 215 220  
 Lys Glu Asp Ala Pro Ser Asp Pro Ala Leu Pro Ala Pro Pro Pro Ala  
 225 230 235 240  
 Thr Ala Val His Leu Lys Leu Val Gln Pro Phe Val Arg Arg Ser Ser  
 245 250 255  
 Ala Arg Ser Leu Gln His Leu Cys Arg Leu Val Ile Asn Arg Leu Val  
 260 265 270  
 Ala Asp Val Asp Cys Leu Pro Leu Pro Arg Arg Met Ala Asp Tyr Leu  
 275 280 285  
 Arg Gln Tyr Pro Phe Gln Leu  
 290 295

&lt;210&gt; 991

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 991

Leu His Lys Val Ser Ile Leu Leu Tyr Ser Ala Val Leu Val Ser Phe  
 1 5 10 15

Ser Cys Ile Gly Phe His Cys Ile Tyr Ser Leu Phe Met Leu Asn Leu

958

Phe Ser Arg Gly Gly Gly Asp Arg Gly Tyr Gly Gly Asn Arg Phe Glu  
145 150 155 160



959

Ser Arg Ser Gly Gly Tyr Gly Gly Ser Arg Asp Tyr Tyr Ser Ser Arg  
 165 170 175

Ser Gln Ser Gly Gly Tyr Ser Asp Arg Ser Ser Gly Gly Ser Tyr Arg  
 180 185 190

Asp Ser Tyr Asp Ser Tyr Ala Thr His Asn Glu  
 195 200

&lt;210&gt; 993

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 993

Gly Gly Leu Ala Trp Arg Ala Leu Arg Thr Ser Gly Thr Leu Leu Arg  
 1 5 10 15

Val Glu Arg Leu Leu Leu Glu Asp Tyr Cys Pro Glu Glu Lys Met Phe  
 20 25 30

Gly Phe His Lys Pro Lys Met Tyr Arg Ser Ile Glu Gly Cys Cys Ile  
 35 40 45

Cys Arg Ala Lys Ser Ser Ser Arg Phe Thr Asp Ser Lys Arg Tyr  
 50 55 60

Glu Lys Asp Phe Gln Ser Cys Phe Gly Leu His Glu Thr Arg Ser Gly  
 65 70 75 80

Asp Ile Cys Asn Ala Cys Val Leu Leu Val Lys Arg Trp Lys Lys Leu  
 85 90 95

Pro Ala Gly Ser Lys Lys Asn Trp Asn His Val Val Asp Ala Arg Ala  
 100 105 110

Gly Pro Ser Leu Lys Thr Thr Leu Lys Pro Lys Lys Val Lys Thr Leu  
 115 120 125

Ser Gly Asn Arg Ile Lys Ser Asn Gln Ile Ser Lys Leu Gln Lys Glu  
 130 135 140

Phe Lys Arg His Asn Ser Asp Ala His Ser Thr Thr Ser Ser Ala Ser  
 145 150 155 160

Pro Ala Gln Ser Pro Cys Tyr Ser Asn Gln Ser Asp Asp Gly Ser Asp  
 165 170 175

Thr Glu Met Ala Ser Gly Ser Asn Arg Thr Pro Val Phe Ser Phe Leu

960

180	185	190
Asp Leu Thr Tyr Trp Lys Arg Gln Lys Ile Cys Cys Gly Ile Ile Tyr		
195	200	205
Lys Gly Arg Phe Gly Glu Val Leu Ile Asp Thr His Leu Phe Lys Pro		
210	215	220
Cys Cys Ser Asn Lys Lys Ala Ala Ala Glu Lys Pro Glu Glu Gln Gly		
225	230	235
Gln Ser Leu Cys Pro Ser Pro Leu Arg Ser Gly Asp		
245	250	

&lt;210&gt; 994

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 994

Arg Thr Arg Gly Xaa Asp Thr Gln Pro Thr Val Cys Thr Asp Ala Pro			
1	5	10	15
Ser Leu Leu Pro Leu Ser Arg Leu His Leu Arg Gly Ser Trp Asp Arg			
20	25	30	
Arg Ser Val Ala Asn Met Gln Leu Phe Val Arg Ala Gln Glu Leu His			
35	40	45	
Thr Phe Glu Val Thr Gly Gln Glu Thr Val Ala Gln Ile Lys Ala His			
50	55	60	
Val Ala Ser Leu Glu Gly Ile Ala Pro Glu Asp Gln Val Val Leu Leu			
65	70	75	80
Ala Gly Ala Pro Leu Glu Asp Glu Ala Thr Leu Gly Gln Cys Gly Val			
85	90	95	
Glu Ala Leu Thr Thr Leu Glu Val Ala Gly Arg Met Leu Gly Gly Lys			
100	105	110	
Val His Gly Ser Leu Ala Arg Ala Gly Lys Val Arg Gly Gln Thr Pro			
115	120	125	

961

Lys Val Ala Lys Gln Glu Lys Lys Lys Lys Lys Thr Gly Arg Ala Lys  
130 135 140

Arg Arg Met Gln Tyr Asn Arg Arg Phe Val Asn Val Val Pro Thr Phe  
145 150 155 160

Gly Lys Lys Lys Gly Pro Asn Ala Asn Ser  
165 170

&lt;210&gt; 995

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 995

Gly Ser Gly Thr His Pro Ala Arg Ala Ala Pro Ala Pro His Ala Arg  
1 5 10 15

Ala Ser Phe Ser Arg Pro Leu Ala Pro Arg Arg Ser His Leu Ser Ser  
20 25 30

Leu Ala His Ala Arg Pro Ala Arg Glu Pro Arg Arg Arg Leu Gly Pro  
35 40 45

Ala Glu Ala Pro Pro Arg His Val Phe Ala Ser Arg Arg Lys Leu Glu  
50 55 60

Thr Lys Ala Gly His Pro Pro Ala Val Lys Ala Gly Gly Met Arg Ile  
65 70 75 80

Val Gln Lys His Pro His Thr Gly Asp Thr Lys Glu Glu Lys Asp Lys  
85 90 95

Asp Asp Gln Glu Trp Glu Ser Pro Ser Pro Pro Lys Pro Thr Val Phe  
100 105 110

Ile Ser Gly Val Ile Ala Arg Gly Asp Lys Asp Phe Pro Pro Ala Ala  
115 120 125

Ala Gln Val Ala His Gln Lys Pro His Ala Ser Met Asp Lys His Pro  
130 135 140

Ser Pro Arg Thr Gln His Ile Gln Gln Pro Arg Lys  
145 150 155

&lt;210&gt; 996

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 996

Asn Ser Ala Glu Gln Glu Gly Ser Gln Trp Ser Leu Pro Val Leu His  
 1 5 10 15

Ser Val Pro Asp Pro Ala Cys Leu Thr Leu Xaa Arg Val Ser Lys Gly  
 20 25 30

Leu Ala Ala Val Arg Ser Ser Val Pro Arg Ala Gly Gly Val Ser Arg  
 35 40 45

Arg Leu Ala Ala Val Arg Ser Thr Val Leu Cys Arg Ala Val Gly Cys  
 50 55 60

Ile Leu Ala Glu Leu Leu Ala His Arg Pro Leu Leu Pro Gly Thr Ser  
 65 70 75 80

Glu Ile His Gln Ile Asp Leu Ile Val Gln Leu Leu Gly Thr Pro Ser  
 85 90 95

Glu Asn Ile Trp Pro Gly Phe Ser Lys Leu Pro Leu Val Gly Gln Tyr  
 100 105 110

Ser Leu Arg Lys Gln Pro Tyr Asn Asn Leu Lys His Lys Phe Pro Trp  
 115 120 125

Leu Ser Glu Ala Gly Leu Arg Cys Cys Thr Ser Cys Ser Cys Thr Thr  
 130 135 140

Leu Arg Lys Gly Arg Arg Pro Gly Thr Ala Trp Arg Ala Pro Ile Ser  
 145 150 155 160

Arg Arg Ser Pro Tyr Pro Val Ser Arg Ser Ser Cys Arg Pro Phe Pro  
 165 170 175

Thr Thr Ala Thr Ser Gly Pro Pro Gln Pro Pro Pro Arg Ala Arg Ala  
 180 185 190

Ser Ala Val Asn Pro Asp Gly Gly Pro Gly Thr Arg Leu Tyr Ser His  
 195 200 205

Thr Arg Ser Ser Asp Gln Trp Cys Leu  
 210 215

&lt;210&gt; 997

&lt;211&gt; 466

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 997

Val Ser Pro Arg Ala Gly Gly Ala Gly Asn Asn Arg Gly Arg Ala His  
 1 5 10 15  
 Arg Ala Ser Ser Cys Ser Leu Pro Ala Pro Pro Ala Thr Leu Asp Pro  
 20 25 30  
 Arg Ile Pro Pro Ala Arg Leu Pro Ala Met Ala Asp Lys Glu Ala Ala  
 35 40 45  
 Phe Asp Asp Ala Val Glu Glu Arg Val Ile Asn Glu Glu Tyr Lys Ile  
 50 55 60  
 Trp Lys Lys Asn Thr Pro Phe Leu Tyr Asp Leu Val Met Thr His Ala  
 65 70 75 80  
 Leu Glu Trp Pro Ser Leu Thr Ala Gln Trp Leu Pro Asp Val Thr Arg  
 85 90 95  
 Pro Glu Gly Lys Asp Phe Ser Ile His Arg Leu Val Leu Gly Thr His  
 100 105 110  
 Thr Ser Asp Glu Gln Asn His Leu Val Ile Ala Ser Val Gln Leu Pro  
 115 120 125  
 Asn Asp Asp Ala Gln Phe Asp Ala Ser His Tyr Asp Ser Glu Lys Gly  
 130 135 140  
 Glu Phe Gly Gly Phe Gly Ser Val Ser Gly Lys Ile Glu Ile Glu Ile  
 145 150 155 160  
 Lys Ile Asn His Glu Gly Glu Val Asn Arg Ala Arg Tyr Met Pro Gln  
 165 170 175  
 Asn Pro Cys Ile Ile Ala Thr Lys Thr Pro Ser Ser Asp Val Leu Val  
 180 185 190  
 Phe Asp Tyr Thr Lys His Pro Ser Lys Pro Asp Pro Ser Gly Glu Cys  
 195 200 205  
 Asn Pro Asp Leu Arg Leu Arg Gly His Gln Lys Glu Gly Tyr Gly Leu  
 210 215 220  
 Ser Trp Asn Pro Asn Leu Ser Gly His Leu Leu Ser Ala Ser Asp Asp

964

225                      230                      235                      240  
 His Thr Ile Cys Leu Trp Asp Ile Ser Ala Val Pro Lys Glu Gly Lys  
                                  245                      250                      255  
 Val Val Asp Ala Lys Thr Ile Phe Thr Gly His Thr Ala Val Val Glu  
                                  260                      265                      270  
 Asp Val Ser Trp His Leu Leu His Glu Ser Leu Phe Gly Ser Val Ala  
                                  275                      280                      285  
 Asp Asp Gln Lys Leu Met Ile Trp Asp Thr Arg Ser Asn Asn Thr Ser  
                                  290                      295                      300  
 Lys Pro Ser His Ser Val Asp Ala His Thr Ala Glu Val Asn Cys Leu  
 305                      310                      315                      320  
 Ser Phe Asn Pro Tyr Ser Glu Phe Ile Leu Ala Thr Gly Ser Ala Asp  
                                  325                      330                      335  
 Lys Thr Val Ala Leu Trp Asp Leu Arg Asn Leu Lys Leu Lys Leu His  
                                  340                      345                      350  
 Ser Phe Glu Ser His Lys Asp Glu Ile Phe Gln Val Gln Trp Ser Pro  
                                  355                      360                      365  
 His Asn Glu Thr Ile Leu Ala Ser Ser Gly Thr Asp Arg Arg Leu Asn  
                                  370                      375                      380  
 Val Trp Asp Leu Ser Lys Ile Gly Glu Glu Gln Ser Pro Glu Asp Ala  
 385                      390                      395                      400  
 Glu Asp Gly Pro Pro Glu Leu Leu Phe Ile His Gly Gly His Thr Ala  
                                  405                      410                      415  
 Lys Ile Ser Asp Phe Ser Trp Asn Pro Asn Glu Pro Trp Val Ile Cys  
                                  420                      425                      430  
 Ser Val Ser Glu Asp Asn Ile Met Gln Val Trp Gln Met Ala Glu Asn  
                                  435                      440                      445  
 Ile Tyr Asn Asp Glu Asp Pro Glu Gly Ser Val Asp Pro Glu Gly Gln  
                                  450                      455                      460  
 Gly Ser  
 465

&lt;210&gt; 998

&lt;211&gt; 165

965

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 998

Thr Arg Pro Pro Thr Arg Arg Pro Thr Arg Pro Pro Lys Ala Lys Lys  
1 5 10 15  
Glu Ala Pro Ala Pro Pro Lys Ala Glu Ala Lys Ala Lys Ala Leu Lys  
20 25 30  
Ala Lys Lys Ala Val Leu Lys Gly Val His Ser His Lys Lys Lys Lys  
35 40 45  
Ile Arg Thr Ser Pro Thr Phe Arg Arg Pro Lys Thr Leu Arg Leu Arg  
50 55 60  
Arg Gln Pro Lys Tyr Pro Arg Lys Ser Ala Pro Arg Arg Asn Lys Leu  
65 70 75 80  
Asp His Tyr Ala Ile Ile Lys Phe Pro Leu Thr Thr Glu Ser Ala Met  
85 90 95  
Lys Lys Ile Glu Asp Asn Asn Thr Leu Val Phe Ile Val Asp Val Lys  
100 105 110  
Ala Asn Lys His Gln Ile Lys Gln Ala Val Lys Lys Leu Tyr Asp Ile  
115 120 125  
Asp Val Ala Lys Val Asn Thr Leu Ile Arg Pro Asp Gly Glu Lys Lys  
130 135 140  
Ala Tyr Val Arg Leu Ala Pro Asp Tyr Asp Ala Leu Asp Val Ala Asn  
145 150 155 160  
Lys Ile Gly Ile Ile  
165

&lt;210&gt; 999

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 999

Pro Glu Asn Ser Thr Ser Ser Phe Leu Leu Trp Gly Cys Pro Pro Ser  
1 5 10 15  
Val Val Cys Phe Thr Val Gly Ser Pro Ala Arg Arg Pro Gln Cys Phe  
20 25 30

966

Leu Arg Ala Glu Met Ala Asn Ser Gly Leu Gln Leu Leu Gly Phe Ser  
           35                          40                          45  
 Met Ala Leu Leu Gly Trp Val Gly Leu Val Ala Cys Thr Ala Ile Pro  
           50                          55                          60  
 Gln Trp Gln Met Ser Ser Tyr Ala Gly Asp Asn Ile Ile Thr Ala Gln  
           65                          70                          75                          80  
 Ala Met Tyr Lys Gly Leu Trp Met Asp Cys Val Thr Gln Ser Thr Gly  
                           85                          90                          95  
 Met Met Ser Cys Lys Met Tyr Asp Ser Val Leu Ala Leu Ser Ala Ala  
                   100                          105                          110  
 Leu Gln Ala Thr Arg Ala Leu Met Val Val Ser Leu Val Leu Gly Phe  
           115                          120                          125  
 Leu Ala Met Phe Val Ala Thr Met Gly Met Lys Cys Thr Arg Cys Gly  
           130                          135                          140  
 Gly Asp Asp Lys Val Lys Lys Ala Arg Ile Ala Met Gly Gly Gly Ile  
           145                          150                          155                          160  
 Ile Phe Ile Val Ala Gly Leu Ala Ala Leu Val Ala Cys Ser Trp Tyr  
                   165                          170                          175  
 Gly His Gln Ile Val Thr Asp Phe Tyr Asn Pro Leu Ile Pro Thr Asn  
           180                          185                          190  
 Ile Lys

&lt;210&gt; 1000

&lt;211&gt; 362

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1000

Arg Gln Gln Arg Thr Arg Lys Lys Lys Pro Ala Gly Ala Ala Leu Gly  
   1                          5                          10                          15

Ala Leu Gly Pro Arg Ala Gln Leu Xaa Ala Ala Ala Gln Thr Asn Ser  
           20                          25                          30



Asn Ala Ala Gly Lys Gln Leu Arg Lys Glu Ser Gln Lys Asp Arg Lys  
 35 40 45

Asn Pro Leu Pro Pro Ser Val Gly Val Val Asp Lys Lys Glu Glu Thr  
 50 55 60

Gln Pro Pro Val Ala Leu Lys Lys Glu Gly Ile Arg Arg Val Gly Arg  
 65 70 75 80

Arg Pro Asp Gln Gln Leu Gln Gly Glu Gly Lys Ile Ile Asp Arg Arg  
 85 90 95

Pro Glu Arg Arg Pro Pro Arg Glu Arg Arg Phe Glu Lys Pro Leu Glu  
 100 105 110

Glu Lys Gly Glu Gly Gly Glu Phe Ser Val Asp Arg Pro Ile Ile Asp  
 115 120 125

Arg Pro Ile Arg Gly Arg Gly Gly Leu Gly Arg Gly Arg Gly Gly Arg  
 130 135 140

Gly Arg Gly Met Gly Arg Gly Asp Gly Phe Asp Ser Arg Gly Lys Arg  
 145 150 155 160

Glu Phe Asp Arg His Ser Gly Ser Asp Arg Ser Ser Phe Ser His Tyr  
 165 170 175

Ser Gly Leu Lys His Glu Asp Lys Arg Gly Gly Ser Gly Ser His Asn  
 180 185 190

Trp Gly Thr Val Lys Asp Glu Leu Thr Asp Leu Asp Gln Ser Asn Val  
 195 200 205

Thr Glu Glu Thr Pro Glu Gly Glu Glu His His Pro Val Ala Asp Thr  
 210 215 220

Glu Asn Lys Glu Asn Glu Val Glu Glu Val Lys Glu Glu Gly Pro Lys  
 225 230 235 240

Glu Met Thr Leu Asp Glu Trp Lys Ala Ile Gln Asn Lys Asp Arg Ala  
 245 250 255

Lys Val Glu Phe Asn Ile Arg Lys Pro Asn Glu Gly Ala Asp Gly Gln  
 260 265 270

Trp Lys Lys Gly Phe Val Leu His Lys Ser Lys Ser Glu Glu Ala His  
 275 280 285

Ala Glu Asp Ser Val Met Asp His His Phe Arg Lys Pro Ala Asn Asp  
 290 295 300

Ile Thr Ser Gln Leu Glu Ile Asn Phe Gly Asp Leu Gly Arg Pro Gly  
305 310 315 320

Arg Gly Gly Arg Gly Gly Arg Gly Gly Arg Gly Arg Gly Gly Arg Pro  
325 330 335

Asn Arg Gly Ser Arg Thr Asp Lys Ser Ser Ala Ser Ala Pro Asp Val  
340 345 350

Asp Asp Pro Glu Ala Phe Pro Ala Leu Ala  
355 360

<210> 1001

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1001

Leu Met Ser Val Val Arg Gly Phe Ser Glu Ala Ala Ala Gln Tyr Asn  
1 5 10 15

Pro Glu Pro Pro Pro Pro Arg Thr His Tyr Ser Asn Ile Glu Ala Asn  
20 25 30

Glu Ser Glu Glu Val Arg Gln Phe Arg Arg Leu Phe Ala Gln Leu Ala  
35 40 45

Gly Asp Asp Met Glu Val Ser Ala Thr Glu Leu Met Asn Ile Leu Asn  
50 55 60

Lys Val Val Thr Arg His Pro Asp Leu Lys Thr Asp Gly Phe Gly Ile  
65 70 75 80

Asp Thr Cys Arg Ser Met Val Ala Val Met Asp Ser Asp Thr Thr Gly  
85 90 95

Lys Leu Gly Phe Glu Glu Phe Lys Tyr Leu Trp Asn Asn Ile Lys Arg  
100 105 110

Trp Gln Ala Ile Tyr Lys Gln Phe Asp Thr Asp Arg Ser Gly Thr Ile  
115 120 125

Cys Ser Ser Glu Leu Pro Gly Ala Phe Glu Ala Ala Gly Phe His Leu  
130 135 140

Asn Glu His Leu Tyr Asn Met Ile Ile Arg Arg Tyr Ser Asp Glu Ser  
145 150 155 160

Gly Asn Met Asp Phe Asp Asn Phe Ile Ser Cys Leu Val Arg Leu Asp  
 165 170 175

Ala Met Phe Arg Ala Phe Lys Ser Leu Asp Lys Asp Gly Thr Gly Gln  
 180 185 190

Ile Gln Val Asn Ile Gln Glu Trp Leu Gln Leu Thr Met Tyr Ser  
 195 200 205

<210> 1002

<211> 21

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1002

Ile Phe Cys Asp Thr Arg Ser His Gln Val Ala Xaa Gly Trp Phe Arg  
 1 5 10 15

Ile Pro Gly Leu Lys  
 20

<210> 1003

<211> 109

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (103)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1003

970

Met Pro Gln Leu Gly Leu Ser Cys Ile Pro Val Glu Gly Pro Xaa Pro  
 1 5 10 15

Cys Leu Xaa Glu Val Arg Leu Cys Cys Val Asn Gly Gln Ala Leu Pro  
 20 25 30

Gln Pro Thr Pro Gly Lys Val His Leu Phe Ser Gly Leu Tyr Lys Val  
 35 40 45

Ser Trp Gly Pro Val Ala Ser Leu Pro Val Arg Ser Asp Phe Ser Leu  
 50 55 60

Ser Ser Ser Pro Val Gly Glu Thr Lys Pro Asp Trp Gly Ala Gln Gly  
 65 70 75 80

Glu His Gly Lys Gly Arg Leu Pro Cys Leu Ser Leu Ala Val Arg Val  
 85 90 95

Arg Val Thr His Thr Lys Xaa Glu Cys Gly Gln Gln Val  
 100 105

&lt;210&gt; 1004

&lt;211&gt; 542

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (252)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (519)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1004

Lys Asp Pro Glu Glu Tyr Cys Cys Thr Pro Ala Ala Arg Gly Arg Gly  
 1 5 10 15

Lys Ser Ala Ala Leu Gly Leu Ala Ile Ala Gly Ala Val Ala Phe Gly  
 20 25 30

Tyr Ser Asn Ile Phe Val Thr Ser Pro Ser Pro Asp Asn Leu His Thr  
 35 40 45

Leu Phe Glu Phe Val Phe Lys Gly Phe Asp Ala Leu Gln Tyr Gln Glu  
 50 55 60

971

His Leu Asp Tyr Glu Ile Ile Gln Ser Leu Asn Pro Glu Phe Asn Lys  
 65 70 75 80

Ala Val Ile Arg Val Asn Val Phe Arg Glu His Arg Gln Thr Ile Gln  
 85 90 95

Tyr Ile His Pro Ala Asp Ala Val Lys Leu Gly Gln Ala Glu Leu Val  
 100 105 110

Val Ile Asp Glu Ala Ala Ala Ile Pro Leu Pro Leu Val Lys Ser Leu  
 115 120 125

Leu Gly Pro Tyr Leu Val Phe Met Ala Ser Thr Ile Asn Gly Tyr Glu  
 130 135 140

Gly Thr Gly Arg Ser Leu Ser Leu Lys Leu Ile Gln Gln Leu Arg Gln  
 145 150 155 160

Gln Ser Ala Gln Ser Gln Val Ser Thr Thr Ala Glu Asn Lys Thr Thr  
 165 170 175

Thr Thr Ala Arg Leu Ala Ser Ala Arg Thr Leu His Glu Val Ser Leu  
 180 185 190

Gln Glu Ser Ile Arg Tyr Ala Pro Gly Asp Ala Val Glu Lys Trp Leu  
 195 200 205

Asn Asp Leu Leu Cys Leu Asp Cys Leu Asn Ile Thr Arg Ile Val Ser  
 210 215 220

Gly Cys Pro Leu Pro Glu Ala Cys Glu Leu Tyr Tyr Val Asn Arg Asp  
 225 230 235 240

Thr Leu Phe Cys Tyr His Lys Ala Ser Glu Val Xaa Leu Gln Arg Leu  
 245 250 255

Met Ala Leu Tyr Val Ala Ser His Tyr Lys Asn Ser Pro Asn Asp Leu  
 260 265 270

Gln Met Leu Ser Asp Ala Pro Ala His His Leu Phe Cys Leu Leu Pro  
 275 280 285

Pro Val Pro Pro Thr Gln Asn Ala Leu Pro Glu Val Leu Ala Val Ile  
 290 295 300

Gln Val Cys Leu Glu Gly Glu Ile Ser Arg Gln Ser Ile Leu Asn Ser  
 305 310 315 320

Leu Ser Arg Gly Lys Lys Ala Ser Gly Asp Leu Ile Pro Trp Thr Val  
 325 330 335

972

Ser Glu Gln Phe Gln Asp Pro Asp Phe Gly Gly Leu Ser Gly Gly Arg  
 340 345 350  
 Val Val Arg Ile Ala Val His Pro Asp Tyr Gln Gly Met Gly Tyr Gly  
 355 360 365  
 Ser Arg Ala Leu Gln Leu Leu Gln Met Tyr Tyr Glu Gly Arg Phe Pro  
 370 375 380  
 Cys Leu Glu Glu Lys Val Leu Glu Thr Pro Gln Glu Ile His Thr Val  
 385 390 395 400  
 Ser Ser Glu Ala Val Ser Leu Leu Glu Glu Val Ile Thr Pro Arg Lys  
 405 410 415  
 Asp Leu Pro Pro Leu Leu Leu Lys Leu Asn Glu Arg Pro Ala Glu Arg  
 420 425 430  
 Leu Asp Tyr Leu Gly Val Ser Tyr Gly Leu Thr Pro Arg Leu Leu Lys  
 435 440 445  
 Phe Trp Lys Arg Ala Gly Phe Val Pro Val Tyr Leu Arg Gln Thr Pro  
 450 455 460  
 Asn Asp Leu Thr Gly Glu His Ser Cys Ile Met Leu Lys Thr Leu Thr  
 465 470 475 480  
 Asp Glu Asp Glu Ala Asp Gln Gly Gly Trp Leu Ala Ala Phe Trp Lys  
 485 490 495  
 Asp Phe Arg Arg Arg Phe Leu Ala Leu Leu Ser Tyr Gln Phe Ser Thr  
 500 505 510  
 Phe Ser Pro Ser Leu Ala Xaa Asn Ile Ile Gln Asn Arg Asn Met Gly  
 515 520 525  
 Lys Pro Ala Gln Pro Ala Leu Ser Arg Glu Glu Leu Glu Ala  
 530 535 540

&lt;210&gt; 1005

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (77)

&lt;223&gt; xaa equals any of the naturally occurring L-amino acids

973

&lt;400&gt; 1005

Asp Ala Ala Asp Thr Ile Glu Thr Asp Thr Ala Thr Ala Asp Thr Thr  
 1 5 10 15

Val Ala Asn Asn Val Pro Pro Ala Ala Thr Ser Leu Ile Asp Leu Trp  
 20 25 30

Pro Gly Asn Gly Glu Gly Ala Ser Thr Leu Gln Gly Glu Pro Arg Ala  
 35 40 45

Pro Thr Pro Pro Ser Gly Thr Glu Val Thr Leu Ala Glu Val Pro Leu  
 50 55 60

Leu Asp Glu Val Ala Pro Glu Pro Leu Leu Pro Ala Xaa Glu Gly Cys  
 65 70 75 80

Ala Thr Leu Leu Asn Phe Asp Glu Leu Pro Glu Pro Pro Ala Thr Phe  
 85 90 95

Cys Asp Pro Glu Glu Val Glu Gly Glu Pro Leu Ala Ala Pro Gln Thr  
 100 105 110

Pro Thr Leu Pro Ser Ala Leu Glu Glu Leu Glu Gln Glu Gln Glu Pro  
 115 120 125

Glu Pro His Leu Leu Thr Asn Gly Glu Thr Thr Gln Lys Glu Gly Thr  
 130 135 140

Gln Ala Ser Glu Gly Tyr Phe Ser Gln Ser Gln Glu Glu Glu Phe Ala  
 145 150 155 160

Gln Ser Glu Glu Leu Cys Ala Lys Ala Pro Pro Pro Val Phe Tyr Asn  
 165 170 175

Lys Pro Pro Glu Ile Asp Ile Thr Cys Trp Asp Ala Asp Pro Val Pro  
 180 185 190

Glu Glu Glu Glu Gly Phe Glu Gly Gly Asp  
 195 200

&lt;210&gt; 1006

&lt;211&gt; 561

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1006

Ser Ala Met Arg Lys Phe Ala Tyr Cys Lys Val Val Leu Ala Thr Ser  
 1 5 10 15

974

Leu Ile Trp Val Leu Leu Asp Met Phe Leu Leu Leu Tyr Phe Ser Glu  
 20 25 30

Cys Asn Lys Cys Asp Glu Lys Lys Glu Arg Gly Leu Pro Ala Gly Asp  
 35 40 45

Val Leu Glu Pro Val Gln Lys Pro His Glu Gly Pro Gly Glu Met Gly  
 50 55 60

Lys Pro Val Val Ile Pro Lys Glu Asp Gln Glu Lys Met Lys Glu Met  
 65 70 75 80

Phe Lys Ile Asn Gln Phe Asn Leu Met Ala Ser Glu Met Ile Ala Leu  
 85 90 95

Asn Arg Ser Leu Pro Asp Val Arg Leu Glu Gly Cys Lys Thr Lys Val  
 100 105 110

Tyr Pro Asp Asn Leu Pro Thr Thr Ser Val Val Ile Val Phe His Asn  
 115 120 125

Glu Ala Trp Ser Thr Leu Leu Arg Thr Val His Ser Val Ile Asn Arg  
 130 135 140

Ser Pro Arg His Met Ile Glu Glu Ile Val Leu Val Asp Asp Ala Ser  
 145 150 155 160

Glu Arg Asp Phe Leu Lys Arg Pro Leu Glu Ser Tyr Val Lys Lys Leu  
 165 170 175

Lys Val Pro Val His Val Ile Arg Met Glu Gln Arg Ser Gly Leu Ile  
 180 185 190

Arg Ala Arg Leu Lys Gly Ala Ala Val Ser Lys Gly Gln Val Ile Thr  
 195 200 205

Phe Leu Asp Ala His Cys Glu Cys Thr Val Gly Trp Leu Glu Pro Leu  
 210 215 220

Leu Ala Arg Ile Lys His Asp Arg Arg Thr Val Val Cys Pro Ile Ile  
 225 230 235 240

Asp Val Ile Ser Asp Asp Thr Phe Glu Tyr Met Ala Gly Ser Asp Met  
 245 250 255

Thr Tyr Gly Gly Phe Asn Trp Lys Leu Asn Phe Arg Trp Tyr Pro Val  
 260 265 270

Pro Gln Arg Glu Met Asp Arg Arg Lys Gly Asp Arg Thr Leu Pro Val  
 275 280 285



975

Arg Thr Pro Thr Met Ala Gly Gly Leu Phe Ser Ile Asp Arg Asp Tyr  
 290 295 300

Phe Gln Glu Ile Gly Thr Tyr Asp Ala Gly Met Asp Ile Trp Gly Gly  
 305 310 315 320

Glu Asn Leu Glu Ile Ser Phe Arg Ile Trp Gln Cys Gly Gly Thr Leu  
 325 330 335

Glu Ile Val Thr Cys Ser His Val Gly His Val Phe Arg Lys Ala Thr  
 340 345 350

Pro Tyr Thr Phe Pro Gly Gly Thr Gly Gln Ile Ile Asn Lys Asn Asn  
 355 360 365

Arg Arg Leu Ala Glu Val Trp Met Asp Glu Phe Lys Asn Phe Phe Tyr  
 370 375 380

Ile Ile Ser Pro Gly Val Thr Lys Val Asp Tyr Gly Asp Ile Ser Ser  
 385 390 395 400

Arg Val Gly Leu Arg His Lys Leu Gln Cys Lys Pro Phe Ser Trp Tyr  
 405 410 415

Leu Glu Asn Ile Tyr Pro Asp Ser Gln Ile Pro Arg His Tyr Phe Ser  
 420 425 430

Leu Gly Glu Ile Arg Asn Val Glu Thr Asn Gln Cys Leu Asp Asn Met  
 435 440 445

Ala Arg Lys Glu Asn Glu Lys Val Gly Ile Phe Asn Cys His Gly Met  
 450 455 460

Gly Gly Asn Gln Val Phe Ser Tyr Thr Ala Asn Lys Glu Ile Arg Thr  
 465 470 475 480

Asp Asp Leu Cys Leu Asp Val Ser Lys Leu Asn Gly Pro Val Thr Met  
 485 490 495

Leu Lys Cys His His Leu Lys Gly Asn Gln Leu Trp Glu Tyr Asp Pro  
 500 505 510

Val Lys Leu Thr Leu Gln His Val Asn Ser Asn Gln Cys Leu Asp Lys  
 515 520 525

Ala Thr Glu Glu Asp Ser Gln Val Pro Ser Ile Arg Asp Cys Asn Gly  
 530 535 540

Ser Arg Ser Gln Gln Trp Leu Leu Arg Asn Val Thr Leu Pro Glu Ile  
 545 550 555 560

Phe

&lt;210&gt; 1007

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1007

Phe Ile Pro Ile Gly Glu Asn Ser Ala Thr Gly Glu Asn Arg Leu Ala  
1 5 10 15

Ser Ala Leu Trp Ile Gly Asp Arg Ser Tyr Pro Gly Leu Ser Glu Gly  
20 25 30

Asn Ser Arg Pro Pro Ile Pro Gly Pro Pro Tyr Val Ala Ser Pro Asp  
35 40 45

Leu Trp Ser His Trp Glu Asp Ser Ala Leu Pro Pro Pro Ser Leu Arg  
50 55 60

Pro Val Gln Pro Thr Trp Glu Gly Ser Ser Glu Ala Gly Leu Asp Trp  
65 70 75 80

Ala Gly Ala Ser Phe Ser Pro Gly Thr Pro Met Trp Ala Ala Leu Asp  
85 90 95

Glu Gln Met Leu Gln Glu Gly Ile Gln Ala Ser Leu Leu Asp Gly Pro  
100 105 110

Ala Gln Glu Pro Gln Ser Ala Pro Trp Leu Ser Lys Ser Ser Val Ser  
115 120 125

Ser Leu Arg Leu Gln Gln Leu Glu Arg Met Gly Phe Pro Thr Glu Gln  
130 135 140

Ala Val Val Ala Leu Ala Ala Thr Gly Arg Val Glu Gly Ala Val Ser  
145 150 155 160

Leu Leu Val Gly Gly Gln Val Gly Thr Glu Thr Leu Val Thr His Gly  
165 170 175

Lys Gly Gly Pro Ala His Ser Glu Gly Pro Gly Pro Pro  
180 185

&lt;210&gt; 1008

&lt;211&gt; 300

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1008

Arg Gln Lys Ser Ser Xaa Leu Trp Pro His Pro Leu Xaa Arg His Arg  
 1 5 10 15

Ala Gly Pro Gly Leu Ala Gly Asn Gly Gly Ile Leu Pro Asn Leu Gly  
 20 25 30

Asp Gly Gly Gly Gly Trp Xaa Trp Trp Glu Gly Asn His Val Leu Leu  
 35 40 45

Asn Leu Phe Leu Val Pro Pro Ile Pro Arg Pro Thr Arg His His Thr  
 50 55 60

Ala Asp Asn Thr His Pro Leu Ala Gln Ala Ser Ile His Met Cys Cys  
 65 70 75 80

Thr Phe Ser Ser Arg His Ala Asp Asn Pro Thr Arg Pro His His His  
 85 90 95

Met Pro Lys Cys Thr His Thr Glu Pro His Arg Pro Ser Gly Pro Ala  
 100 105 110

Gly Ser Ser Leu Gly Phe Pro Leu Ala His Phe Gln Gly Pro Gly Ala  
 115 120 125

Ala Thr Lys Cys Glu Ser Ser Val Ala Ala Pro Ser Phe Ser Pro Ser  
 130 135 140

Thr Ser Ile Gly Pro Ile Gly Lys His Arg Gly Leu Thr Leu Phe His  
 145 150 155 160

Ile Pro Cys Pro Ala Leu Lys Trp Thr Ile Thr Phe Trp Asp Arg Leu  
 165 170 175

978

Lys Phe Leu Lys Ser Leu His His Ser Val Pro Ser Lys Gly Ser Pro  
                   180                                  185                                  190  
 Cys Gln Trp Gly Phe Glu Arg Glu Phe Leu Glu Pro Thr Phe Lys Phe  
                   195                                  200                                  205  
 Cys Leu Ile Trp Arg Glu Thr Lys Ile Gly Arg Gly Lys Arg Thr Pro  
                   210                                  215                                  220  
 Asp Val Leu Leu Leu Pro Glu Ile Leu Glu Thr Asp Ser Leu Asp Trp  
                   225                                  230                                  235                                  240  
 Lys Met Asp Lys Ser Ala Leu Thr Trp Arg Val Gly Thr Arg Trp Gly  
                                   245                                  250                                  255  
 Pro Ala Leu Pro Thr Ala Ala Val Ala Ser Ser Leu Ala Gly Phe Ala  
                                   260                                  265                                  270  
 Gly Arg Gln Gln Glu Gly Glu Gly Gly Ser Thr Ala Arg Gly Thr Gly  
                   275                                  280                                  285  
 Gly Ala Ala Gly Leu Gln Glu Leu Phe Phe His Cys  
                   290                                  295                                  300

&lt;210&gt; 1009

&lt;211&gt; 344

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1009

Arg Pro Pro Cys Pro His Ser Arg Ser Xaa Trp Arg Ile Leu Ser Leu  
           1                                  5                                  10                                  15

Thr Pro Asn Pro Asp Pro Leu Pro Asn Met Ser Val Phe Phe Phe Ile  
                   20                                  25                                  30

Phe Leu Asn Ile Phe Xaa Leu Ala Phe Ser Ser Pro Gly Ser Gln Pro  
                   35                                  40                                  45

Leu Leu Asn Ser Pro Pro Ser Phe Val Cys Trp Ser Arg Gly Phe Met  
 50 55 60

Glu Met Asn Gly Arg Gly Glu Leu Val Glu Ser Leu Lys Arg Phe Cys  
 65 70 75 80

Ala Ser Thr Arg Leu Pro Pro Thr Pro Leu Leu Leu Phe Pro Glu Glu  
 85 90 95

Glu Ala Thr Asn Gly Arg Glu Gly Leu Leu Arg Phe Ser Ser Trp Pro  
 100 105 110

Phe Ser Ile Gln Asp Val Val Gln Pro Leu Thr Leu Gln Val Gln Arg  
 115 120 125

Pro Leu Val Ser Val Thr Val Ser Asp Ala Ser Trp Val Ser Glu Leu  
 130 135 140

Leu Trp Ser Leu Phe Val Pro Phe Thr Val Tyr Gln Val Arg Trp Leu  
 145 150 155 160

Arg Pro Val His Arg Gln Leu Gly Glu Ala Asn Glu Glu Phe Ala Leu  
 165 170 175

Arg Val Gln Gln Leu Val Ala Lys Glu Leu Gly Gln Thr Gly Thr Arg  
 180 185 190

Leu Thr Pro Ala Asp Lys Ala Glu His Met Lys Arg Gln Arg His Pro  
 195 200 205

Arg Leu Arg Pro Gln Ser Ala Gln Ser Ser Phe Pro Pro Ser Pro Gly  
 210 215 220

Pro Ser Pro Asp Val Gln Leu Ala Thr Leu Ala Gln Arg Val Lys Glu  
 225 230 235 240

Val Leu Pro His Val Pro Leu Gly Val Ile Gln Arg Asp Leu Ala Lys  
 245 250 255

Thr Gly Cys Val Asp Leu Thr Ile Thr Asn Leu Leu Glu Gly Ala Val  
 260 265 270

Ala Phe Met Pro Glu Asp Ile Thr Lys Gly Thr Gln Ser Leu Pro Thr  
 275 280 285

Ala Ser Ala Ser Lys Phe Pro Ser Ser Gly Pro Val Thr Pro Gln Pro  
 290 295 300

Thr Ala Leu Thr Phe Ala Lys Ser Ser Trp Ala Arg Gln Glu Ser Leu  
 305 310 315 320

980

Gln Glu Arg Lys Gln Ala Leu Tyr Glu Tyr Ala Arg Arg Arg Phe Thr  
325 330 335

Glu Arg Arg Ala Gln Glu Ala Asp  
340

&lt;210&gt; 1010

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1010

Pro His Cys Glu Pro Asn Pro Gly Ala Gly Ala Met Val Leu Leu His  
1 5 10 15

Val Leu Phe Glu His Ala Val Gly Tyr Ala Leu Leu Ala Leu Lys Glu  
20 25 30

Val Glu Glu Ile Ser Leu Leu Gln Pro Gln Val Glu Glu Ser Val Leu  
35 40 45

Asn Leu Gly Lys Phe His Ser Ile Val Arg Leu Val Ala Phe Cys Pro  
50 55 60

Phe Ala Ser Ser Gln Val Ala Leu Glu Asn Ala Asn Ala Val Ser Glu  
65 70 75 80

Gly Val Val His Glu Asp Leu Arg Leu Leu Leu Glu Thr His Leu Pro  
85 90 95

Ser Lys Lys Lys Lys Val Leu Leu Gly Val Gly Asp Pro Lys Ile Gly  
100 105 110

Ala Ala Ile Gln Glu Glu Leu Gly Tyr Asn Cys Gln Thr Gly Gly Val  
115 120 125

Ile Ala Glu Ile Leu Arg Gly Val Arg Leu His Phe His Asn Leu Val  
130 135 140

Lys Gly Leu Thr Asp Leu Ser Ala Cys Lys Ala Gln Leu Gly Leu Gly  
145 150 155 160

His Ser Tyr Ser Arg Ala Lys Val Lys Phe Asn Val Asn Arg Val Asp  
165 170 175

Asn Met Ile Ile Gln Ser Ile Ser Leu Leu Asp Gln Leu Asp Lys Asp  
180 185 190

Ile Asn Thr Phe Ser Met Arg Val Arg Glu Trp Tyr Gly Tyr His Phe  
 195 200 205

Pro Glu Leu Val Lys Ile Ile Asn Asp Asn Ala Thr Tyr Cys Arg Leu  
 210 215 220

Ala Gln Phe Ile Gly Asn Arg Arg Asn  
 225 230

<210> 1011

<211> 187

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1011

Gly Thr Ser Xaa Phe Ser Phe Pro Leu Gly Arg Glu Glu Ala Met Ala  
 1 5 10 15

Ala Met Ala Ser Leu Gly Ala Leu Ala Leu Leu Leu Ser Ser Leu  
 20 25 30

Ser Arg Cys Ser Ala Glu Ala Cys Leu Glu Pro Gln Ile Thr Pro Ser  
 35 40 45

Tyr Tyr Thr Thr Ser Asp Ala Val Ile Ser Thr Glu Thr Val Phe Ile  
 50 55 60

Val Glu Ile Ser Leu Thr Cys Lys Asn Arg Val Gln Asn Met Ala Leu  
 65 70 75 80

Tyr Ala Asp Val Gly Gly Lys Gln Phe Pro Val Thr Arg Gly Gln Asp  
 85 90 95

Val Gly Arg Tyr Gln Val Ser Trp Ser Leu Asp His Lys Ser Ala His  
 100 105 110

Ala Gly Thr Tyr Glu Val Arg Phe Phe Asp Glu Glu Ser Tyr Ser Leu  
 115 120 125

Leu Arg Lys Ala Gln Arg Asn Asn Glu Asp Ile Ser Ile Ile Pro Pro  
 130 135 140

Leu Phe Thr Val Ser Val Asp His Arg Gly Thr Trp Asn Gly Pro Trp  
 145 150 155 160

982

Val Ser Thr Glu Val Leu Ala Ala Ala Ile Gly Leu Val Ile Tyr Tyr  
165 170 175

Leu Ala Phe Ser Ala Lys Ser His Ile Gln Ala  
180 185

&lt;210&gt; 1012

&lt;211&gt; 708

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (18)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (153)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (229)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (433)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1012

Ala Leu Arg Pro Ile Ser Ser Val Arg Ala Gly Asp Arg Cys Gln Arg  
1 5 10 15

Ser Xaa Ala Ala Asp Met Ala Ala Ser Thr Ala Ala Gly Lys Gln Arg  
20 25 30

Ile Pro Lys Val Ala Lys Val Lys Asn Lys Ala Pro Ala Glu Val Gln  
35 40 45

Ile Thr Ala Glu Gln Leu Leu Arg Glu Ala Lys Glu Arg Glu Leu Glu  
50 55 60

Leu Leu Pro Pro Pro Pro Gln Gln Lys Ile Thr Asp Glu Glu Glu Leu  
65 70 75 80

Asn Asp Tyr Lys Leu Arg Lys Arg Lys Thr Phe Glu Asp Asn Ile Arg



983

85	90	95
Lys Asn Arg Thr Val Ile Ser Asn Trp Ile Lys Tyr Ala Gln Trp Glu 100	105	110
Glu Ser Leu Lys Glu Ile Gln Arg Ala Arg Ser Ile Tyr Glu Arg Ala 115	120	125
Leu Asp Val Asp Tyr Arg Asn Ile Thr Leu Trp Leu Lys Tyr Ala Glu 130	135	140
Met Glu Met Lys Asn Arg Gln Val Xaa His Ala Arg Asn Ile Trp Asp 145	150	155 160
Arg Ala Ile Thr Thr Leu Pro Arg Val Asn Gln Phe Trp Tyr Lys Tyr 165	170	175
Thr Tyr Met Glu Glu Met Leu Gly Asn Val Ala Gly Ala Arg Gln Val 180	185	190
Phe Glu Arg Trp Met Glu Trp Gln Pro Glu Glu Gln Ala Trp His Ser 195	200	205
Tyr Ile Asn Phe Glu Leu Arg Tyr Lys Glu Val Asp Arg Ala Arg Thr 210	215	220
Ile Tyr Glu Arg Xaa Val Leu Val His Pro Asp Val Lys Asn Trp Ile 225	230	235 240
Lys Tyr Ala Arg Phe Glu Glu Lys His Ala Tyr Phe Ala His Ala Arg 245	250	255
Lys Val Tyr Glu Arg Ala Val Glu Phe Phe Gly Asp Glu His Met Asp 260	265	270
Glu His Leu Tyr Val Ala Phe Ala Lys Phe Glu Glu Asn Gln Lys Glu 275	280	285
Phe Glu Arg Val Arg Val Ile Tyr Lys Tyr Ala Leu Asp Arg Ile Ser 290	295	300
Lys Gln Asp Ala Gln Glu Leu Phe Lys Asn Tyr Thr Ile Phe Glu Lys 305	310	315 320
Lys Phe Gly Asp Arg Arg Gly Ile Glu Asp Ile Ile Val Ser Lys Arg 325	330	335
Arg Phe Gln Tyr Glu Glu Glu Val Lys Ala Asn Pro His Asn Tyr Asp 340	345	350
Ala Trp Phe Asp Tyr Leu Arg Leu Val Glu Ser Asp Ala Glu Ala Glu		

355	360	365
Ala Val Arg Glu Val Tyr Glu Arg Ala Ile Ala Asn Val Pro Pro Ile		
370	375	380
Gln Glu Lys Arg His Trp Lys Arg Tyr Ile Tyr Leu Trp Ile Asn Tyr		
385	390	400
Ala Leu Tyr Glu Glu Leu Glu Ala Lys Asp Pro Glu Arg Thr Arg Gln		
405	410	415
Val Tyr Gln Ala Ser Leu Glu Leu Ile Pro His Lys Lys Phe Thr Phe		
420	425	430
Xaa Lys Met Trp Ile Leu Tyr Ala Gln Phe Glu Ile Arg Gln Lys Asn		
435	440	445
Leu Ser Leu Ala Arg Arg Ala Leu Gly Thr Ser Ile Gly Lys Cys Pro		
450	455	460
Lys Asn Lys Leu Phe Lys Val Tyr Ile Glu Leu Glu Leu Gln Leu Arg		
465	470	475
Glu Phe Asp Arg Cys Arg Lys Leu Tyr Glu Lys Phe Leu Glu Phe Gly		
485	490	495
Pro Glu Asn Cys Thr Ser Trp Ile Lys Phe Ala Glu Leu Glu Thr Ile		
500	505	510
Leu Gly Asp Ile Asp Arg Ala Arg Ala Ile Tyr Glu Leu Ala Ile Ser		
515	520	525
Gln Pro Arg Leu Asp Met Pro Glu Val Leu Trp Lys Ser Tyr Ile Asp		
530	535	540
Phe Glu Ile Glu Gln Glu Glu Thr Glu Arg Thr Arg Asn Leu Tyr Arg		
545	550	555
Arg Leu Leu Gln Arg Thr Gln His Val Lys Val Trp Ile Ser Phe Ala		
565	570	575
Gln Phe Glu Leu Ser Ser Gly Lys Glu Gly Ser Leu Thr Lys Cys Arg		
580	585	590
Gln Ile Tyr Glu Glu Ala Asn Lys Thr Met Arg Asn Cys Glu Glu Lys		
595	600	605
Glu Glu Arg Leu Met Leu Leu Glu Ser Trp Arg Ser Phe Glu Glu Glu		
610	615	620
Phe Gly Thr Ala Ser Asp Lys Glu Arg Val Asp Lys Leu Met Pro Glu		

985

625                      630                      635                      640  
 Lys Val Lys Lys Arg Arg Lys Val Gln Thr Asp Asp Gly Ser Asp Ala  
                                 645                      650                      655  
 Gly Trp Glu Glu Tyr Phe Asp Tyr Ile Phe Pro Glu Asp Ala Ala Asn  
                                 660                      665                      670  
 Gln Pro Asn Leu Lys Leu Leu Ala Met Ala Lys Leu Trp Lys Lys Gln  
                                 675                      680                      685  
 Gln Gln Glu Lys Glu Asp Ala Glu His His Pro Asp Glu Asp Val Asp  
                                 690                      695                      700  
 Glu Ser Glu Ser  
 705

<210> 1013  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 1013  
 Leu Pro Pro Gln Val Ala Asp Thr Met Leu Pro Pro Met Ala Leu Pro  
   1                                5                                10                                15  
 Ser Val Ser Trp Met Leu Leu Ser Cys Leu Met Leu Leu Ser Gln Val  
                                 20                                25                                30  
 Gln Gly Glu Glu Pro Gln Arg Glu Leu Pro Ser Ala Arg Ile Arg Cys  
                                 35                                40                                45  
 Pro Lys Gly Ser Lys Ala Tyr Gly Ser His Cys Tyr Ala Leu Phe Leu  
                                 50                                55                                60  
 Ser Pro Lys Ser Trp Thr Asp Ala Asp Leu Ala Cys Gln Lys Arg Pro  
   65                                70                                75                                80  
 Ser Gly Asn Leu Val Ser Val Leu Ser Gly Ala Glu Gly Ser Phe Val  
                                 85                                90                                95  
 Ser Ser Leu Val Lys Ser Ile Gly Asn Ser Tyr Ser Tyr Val Trp Ile  
                                 100                                105                                110  
 Gly Leu His Asp Pro Thr Gln Gly Thr Glu Pro Asn Gly Glu Gly Trp  
                                 115                                120                                125  
 Glu Trp Ser Ser Ser Asp Val Met Asn Tyr Phe Ala Trp Glu Arg Asn  
                                 130                                135                                140

986

Pro Ser Thr Ile Ser Ser Pro Gly His Cys Ala Ser Leu Ser Arg Ser  
 145 150 155 160

Thr Ala Phe Leu Arg Trp Lys Asp Tyr Asn Cys Asn Val Arg Leu Pro  
 165 170 175

Tyr Val Cys Lys Phe Thr Asp  
 180

<210> 1014

<211> 213

<212> PRT

<213> Homo sapiens

<400> 1014

Val Thr Asp Gly Gly Ser Ala Arg Lys Pro Lys Met Ala Val Pro Ala  
 1 5 10 15

Ala Leu Ile Leu Arg Glu Ser Pro Ser Met Lys Lys Ala Val Ser Leu  
 20 25 30

Ile Asn Ala Ile Asp Thr Gly Arg Phe Pro Arg Leu Leu Thr Arg Ile  
 35 40 45

Leu Gln Lys Leu His Leu Lys Ala Glu Ser Ser Phe Ser Glu Glu Glu  
 50 55 60

Glu Glu Lys Leu Gln Ala Ala Phe Ser Leu Glu Lys Gln Asp Leu His  
 65 70 75 80

Leu Val Leu Glu Thr Ile Ser Phe Ile Leu Glu Gln Ala Val Tyr His  
 85 90 95

Asn Val Lys Pro Ala Ala Leu Gln Gln Gln Leu Glu Asn Ile His Leu  
 100 105 110

Arg Gln Asp Lys Ala Glu Ala Phe Val Asn Thr Trp Ser Ser Met Gly  
 115 120 125

Gln Glu Thr Val Glu Lys Phe Arg Gln Arg Ile Leu Ala Pro Cys Lys  
 130 135 140

Leu Glu Thr Val Gly Trp Gln Leu Asn Leu Gln Met Ala His Ser Ala  
 145 150 155 160

Gln Ala Lys Leu Lys Ser Pro Gln Ala Val Leu Gln Leu Gly Val Asn  
 165 170 175

Asn Glu Asp Ser Lys Ser Leu Glu Lys Val Leu Val Glu Phe Ser His  
 180 185 190

Lys Glu Leu Phe Asp Phe Tyr Asn Lys Leu Glu Thr Ile Gln Ala Gln  
 195 200 205

Leu Asp Ser Leu Thr  
 210

<210> 1015

<211> 544

<212> PRT

<213> Homo sapiens

<400> 1015

Ala Pro Gly Thr Met Asn Gly Glu Ala Ile Cys Ser Ala Leu Pro Thr  
 1 5 10 15

Ile Pro Tyr His Lys Leu Ala Asp Leu Arg Tyr Leu Ser Arg Gly Ala  
 20 25 30

Ser Gly Thr Val Ser Ser Ala Arg His Ala Asp Trp Arg Val Gln Val  
 35 40 45

Ala Val Lys His Leu His Ile His Thr Pro Leu Leu Asp Ser Glu Arg  
 50 55 60

Lys Asp Val Leu Arg Glu Ala Glu Ile Leu His Lys Ala Arg Phe Ser  
 65 70 75 80

Tyr Ile Leu Pro Ile Leu Gly Ile Cys Asn Glu Pro Glu Phe Leu Gly  
 85 90 95

Ile Val Thr Glu Tyr Met Pro Asn Gly Ser Leu Asn Glu Leu Leu His  
 100 105 110

Arg Lys Thr Glu Tyr Pro Asp Val Ala Trp Pro Leu Arg Phe Arg Ile  
 115 120 125

Leu His Glu Ile Ala Leu Gly Val Asn Tyr Leu His Asn Met Thr Pro  
 130 135 140

Pro Leu Leu His His Asp Leu Lys Thr Gln Asn Ile Leu Leu Asp Asn  
 145 150 155 160

Glu Phe His Val Lys Ile Ala Asp Phe Gly Leu Ser Lys Trp Arg Met  
 165 170 175

Met Ser Leu Ser Gln Ser Arg Ser Ser Lys Ser Ala Pro Glu Gly Gly

180	185	190
Thr Ile Ile Tyr Met Pro Pro Glu Asn Tyr Glu Pro Gly Gln Lys Ser		
195	200	205
Arg Ala Ser Ile Lys His Asp Ile Tyr Ser Tyr Ala Val Ile Thr Trp		
210	215	220
Glu Val Leu Ser Arg Lys Gln Pro Phe Glu Asp Val Thr Asn Pro Leu		
225	230	235
Gln Ile Met Tyr Ser Val Ser Gln Gly His Arg Pro Val Ile Asn Glu		
245	250	255
Glu Ser Leu Pro Tyr Asp Ile Pro His Arg Ala Arg Met Ile Ser Leu		
260	265	270
Ile Glu Ser Gly Trp Ala Gln Asn Pro Asp Glu Arg Pro Ser Phe Leu		
275	280	285
Lys Cys Leu Ile Glu Leu Glu Pro Val Leu Arg Thr Phe Glu Glu Ile		
290	295	300
Thr Phe Leu Glu Ala Val Ile Gln Leu Lys Lys Thr Lys Leu Gln Ser		
305	310	315
Val Ser Ser Ala Ile His Leu Cys Asp Lys Lys Lys Met Glu Leu Ser		
325	330	335
Leu Asn Ile Pro Val Asn His Gly Pro Gln Glu Glu Ser Cys Gly Ser		
340	345	350
Ser Gln Leu His Glu Asn Ser Gly Ser Pro Glu Thr Ser Arg Ser Leu		
355	360	365
Pro Ala Pro Gln Asp Asn Asp Phe Leu Ser Arg Lys Ala Gln Asp Cys		
370	375	380
Tyr Phe Met Lys Leu His His Cys Pro Gly Asn His Ser Trp Asp Ser		
385	390	395
Thr Ile Ser Gly Ser Gln Arg Ala Ala Phe Cys Asp His Lys Thr Thr		
405	410	415
Pro Cys Ser Ser Ala Ile Ile Asn Pro Leu Ser Thr Ala Gly Asn Ser		
420	425	430
Glu Arg Leu Gln Pro Gly Ile Ala Gln Gln Trp Ile Gln Ser Lys Arg		
435	440	445
Glu Asp Ile Val Asn Gln Met Thr Glu Ala Cys Leu Asn Gln Ser Leu		

989

450                      455                      460  
 Asp Ala Leu Leu Ser Arg Asp Leu Ile Met Lys Glu Asp Tyr Glu Leu  
 465                      470                      475                      480  
 Val Ser Thr Lys Pro Thr Arg Thr Ser Lys Val Arg Gln Leu Leu Asp  
                     485                      490                      495  
 Thr Thr Asp Ile Gln Gly Glu Glu Phe Ala Lys Val Ile Val Gln Lys  
                     500                      505                      510  
 Leu Lys Asp Asn Lys Gln Met Gly Leu Gln Pro Tyr Pro Glu Ile Leu  
                     515                      520                      525  
 Val Val Ser Arg Ser Pro Ser Leu Asn Leu Leu Gln Asn Lys Ser Met  
                     530                      535                      540

<210> 1016  
 <211> 257  
 <212> PRT  
 <213> Homo sapiens

<400> 1016  
 His Pro Ser Ala Pro Arg Ala Gly Lys Ala His Leu Lys Arg Ala Ile  
   1                      5                      10                      15  
 Leu Gly Gln Glu Glu Ala Leu Arg Leu His Ala Leu Cys Arg Val Leu  
                     20                      25                      30  
 Arg Glu Val Asp Leu Leu Arg Ala Val Ile Ser Gln Thr Leu Gln Arg  
                     35                      40                      45  
 Ser Leu Ala Lys Tyr Ala Glu Leu Asp Arg Glu Asp Asp Phe Cys Glu  
                     50                      55                      60  
 Ala Ala Glu Ala Pro Asp Ile Gln Pro Lys Thr His Gln Lys Pro Glu  
                     65                      70                      75                      80  
 Ala Arg Met Pro Arg Leu Ser Gln Gly Lys Gly Pro Asp Ile Phe His  
                     85                      90                      95  
 Arg Leu Gly Pro Leu Ser Val Phe Ser Ala Lys Asn Arg Trp Arg Leu  
                     100                      105                      110  
 Val Gly Pro Val His Leu Thr Arg Gly Glu Gly Gly Phe Gly Leu Thr  
                     115                      120                      125

990

Leu Arg Gly Asp Ser Pro Val Leu Ile Ala Ala Val Ile Pro Gly Ser  
130 135 140

Gln Ala Ala Ala Ala Gly Leu Lys Glu Gly Asp Tyr Ile Val Ser Val  
145 150 155 160

Asn Gly Gln Pro Cys Arg Trp Trp Arg His Ala Glu Val Val Thr Glu  
165 170 175

Leu Lys Ala Ala Gly Glu Ala Gly Ala Ser Leu Gln Val Val Ser Leu  
180 185 190

Leu Pro Ser Ser Arg Leu Pro Ser Leu Gly Asp Arg Arg Pro Val Leu  
195 200 205

Leu Gly Pro Arg Gly Leu Leu Arg Ser Gln Arg Glu His Gly Cys Lys  
210 215 220

Thr Pro Ala Ser Thr Trp Ala Ser Pro Arg Ala Leu Leu Asn Trp Ser  
225 230 235 240

Arg Lys Ala Gln Gln Gly Lys Thr Gly Gly Cys Pro Ser Pro Val Pro  
245 250 255

Gln

<210> 1017

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1017

Ala Ser Asp Arg Arg Gly Tyr Ser Ser Arg Ile Val Gly Gly Asn Met  
1 5 10 15

Ser Leu Leu Ser Gln Trp Pro Trp Gln Ala Ser Leu Gln Phe Gln Gly  
20 25 30

Tyr His Leu Cys Gly Gly Ser Val Ile Thr Pro Leu Trp Ile Ile Thr  
35 40 45

Ala Ala His Cys Val Tyr Asp Leu Tyr Leu Pro Lys Ser Trp Thr Ile  
50 55 60

Gln Val Gly Leu Val Ser Leu Leu Asp Asn Pro Ala Pro Ser His Leu  
65 70 75 80



991

Val Glu Lys Ile Val Tyr His Ser Lys Tyr Lys Pro Lys Arg Leu Gly  
85 90 95

Asn Asp Ile Ala Leu Met Lys Leu Ala Gly Pro Leu Thr Phe Asn Glu  
100 105 110

Met Ile Gln Pro Val Cys Leu Pro Asn Ser Glu Glu Asn Phe Pro Asp  
115 120 125

Gly Lys Val Cys Trp Thr Ser Gly Trp Gly Ala Thr Glu Asp Gly Ala  
130 135 140

Gly Asp Ala Ser Pro Val Leu Asn His Ala Ala Val Pro Leu Ile Ser  
145 150 155 160

Asn Lys Ile Cys Asn His Arg Asp Val Tyr Gly Gly Ile Ile Ser Pro  
165 170 175

Ser Met Leu Cys Ala Gly Tyr Leu Thr Gly Gly Val Asp Ser Cys Gln  
180 185 190

Gly Asp Ser Gly Gly Pro Leu Val Cys Gln Glu Arg Arg Leu Trp Lys  
195 200 205

Leu Val Gly Ala Thr Ser Phe Gly Ile Gly Cys Ala Glu Val Asn Lys  
210 215 220

Pro Gly Val Tyr Thr Arg Val Thr Ser Phe Leu Asp Trp Ile His Glu  
225 230 235 240

Gln Met Glu Arg Asp Leu Lys Thr  
245

&lt;210&gt; 1018

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1018

Gly Arg Val Ser Ala Pro Val Pro Gly Lys Met Val Leu Gly Gly Cys  
1 5 10 15

Pro Val Ser Tyr Leu Leu Leu Cys Gly Gln Ala Ala Leu Leu Leu Gly  
20 25 30

Asn Leu Leu Leu Leu His Cys Val Ser Arg Ser His Ser Gln Asn Ala  
35 40 45

Thr Ala Glu Pro Glu Leu Thr Ser Ala Gly Ala Ala Gln Pro Glu Gly

992

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      50              55              60
Pro Gly Gly Ala Ala Ser Trp Glu Tyr Gly Asp Pro His Ser Pro Val
 65              70              75              80
Ile Leu Cys Ser Tyr Leu Pro Asp Glu Phe Ile Glu Cys Glu Asp Pro
      85              90              95
Val Asp His Val Gly Asn Ala Thr Ala Ser Gln Glu Leu Gly Tyr Gly
      100              105              110
Cys Leu Lys Phe Gly Gly Gln Ala Tyr Ser Asp Val Glu His Thr Ser
      115              120              125
Val Gln Cys His Ala Leu Asp Gly Ile Glu Cys Ala Ser Pro Arg Thr
      130              135              140
Phe Leu Arg Glu Asn Lys Pro Cys Ile Lys Tyr Thr Gly His Tyr Phe
      145              150              155              160
Ile Thr Thr Leu Leu Tyr Ser Phe Phe Leu Gly Cys Phe Gly Val Asp
      165              170              175
Arg Phe Cys Leu Gly His Thr Gly Thr Ala Val Gly Lys Leu Leu Thr
      180              185              190
Leu Gly Gly Leu Gly Ile Trp Trp Phe Val Asp Leu Ile Leu Leu Ile
      195              200              205
Thr Gly Gly Leu Met Pro Ser Asp Gly Ser Asn Trp Cys Thr Val Tyr
      210              215              220

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&lt;210&gt; 1019

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1019

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Asn Val Pro Val Cys His Leu Ser Thr Trp Lys Ile Leu Tyr Ile Trp
 1              5              10              15
Lys Val Tyr Ala Ser Leu Asn Lys Tyr Met Leu Leu Asn Lys Pro Tyr
      20              25              30
His Ser Leu Arg Asn Cys Ile Tyr Phe Ile Ile Cys Pro Phe Arg Asn
      35              40              45

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993

Gln Val Phe Cys Ile  
50

<210> 1020  
<211> 70  
<212> PRT  
<213> Homo sapiens

<400> 1020  
Phe Tyr Thr Asn Leu Ile Trp Leu Pro Phe Val Pro Leu Ile Ser Gln  
1 5 10 15  
Met Phe Lys Cys Ile Gly Phe Gly Phe Ser Met Tyr Lys Leu Pro Tyr  
20 25 30  
Leu Leu Met Ser Ile Phe Cys Leu Phe Asn Phe Val Tyr Leu Leu Phe  
35 40 45  
Cys Phe Trp Ile His Phe Leu Ile Arg Ser His Met Ile Asn Ile Ile  
50 55 60  
Ser Ile Val Ile Ile Pro  
65 70

<210> 1021  
<211> 337  
<212> PRT  
<213> Homo sapiens

<400> 1021  
Arg Lys Arg Lys Gln Ala Ala Arg Ala Ala Glu Glu Pro Gly Ala Ala  
1 5 10 15  
Met Asp Val Arg Ala Leu Pro Trp Leu Pro Trp Leu Leu Trp Leu Leu  
20 25 30  
Cys Arg Gly Gly Gly Asp Ala Asp Ser Arg Ala Pro Phe Thr Pro Thr  
35 40 45  
Trp Pro Arg Ser Arg Glu Arg Glu Ala Ala Ala Phe Arg Glu Ser Leu  
50 55 60  
Asn Arg His Arg Tyr Leu Asn Ser Leu Phe Pro Ser Glu Asn Ser Thr  
65 70 75 80  
Ala Phe Tyr Gly Ile Asn Gln Phe Ser Tyr Leu Phe Pro Glu Glu Phe

994

85					90					95					
Lys	Ala	Ile	Tyr	Leu	Arg	Ser	Lys	Pro	Ser	Lys	Phe	Pro	Arg	Tyr	Ser
			100					105					110		
Ala	Glu	Val	His	Met	Ser	Ile	Pro	Asn	Val	Ser	Leu	Pro	Leu	Arg	Phe
			115				120					125			
Asp	Trp	Arg	Asp	Lys	Gln	Val	Val	Thr	Gln	Val	Arg	Asn	Gln	Gln	Met
			130				135					140			
Cys	Gly	Gly	Cys	Trp	Ala	Phe	Ser	Val	Val	Gly	Ala	Val	Glu	Ser	Ala
			145				150					155			160
Tyr	Ala	Ile	Lys	Gly	Lys	Pro	Leu	Glu	Asp	Leu	Ser	Val	Gln	Gln	Val
				165					170					175	
Ile	Asp	Cys	Ser	Tyr	Asn	Asn	Tyr	Gly	Cys	Asn	Gly	Gly	Ser	Thr	Leu
			180					185					190		
Asn	Ala	Leu	Asn	Trp	Leu	Asn	Lys	Met	Gln	Val	Lys	Leu	Val	Lys	Asp
			195				200					205			
Ser	Glu	Tyr	Pro	Phe	Lys	Ala	Gln	Asn	Gly	Leu	Cys	His	Tyr	Phe	Ser
			210				215					220			
Gly	Ser	His	Ser	Gly	Phe	Ser	Ile	Lys	Gly	Tyr	Ser	Ala	Tyr	Asp	Phe
				225			230					235			240
Ser	Asp	Gln	Glu	Asp	Glu	Met	Ala	Lys	Ala	Leu	Leu	Thr	Phe	Gly	Pro
				245					250					255	
Leu	Val	Val	Ile	Val	Asp	Ala	Val	Ser	Trp	Gln	Asp	Tyr	Leu	Gly	Gly
			260						265				270		
Ile	Ile	Gln	His	His	Cys	Ser	Ser	Gly	Glu	Ala	Asn	His	Ala	Val	Leu
			275				280					285			
Ile	Thr	Gly	Phe	Asp	Lys	Thr	Gly	Ser	Thr	Pro	Tyr	Trp	Ile	Val	Arg
			290				295					300			
Asn	Ser	Trp	Gly	Ser	Ser	Trp	Gly	Val	Asp	Gly	Tyr	Ala	His	Val	Lys
			305				310					315			320
Met	Gly	Ser	Asn	Val	Cys	Gly	Ile	Ala	Asp	Ser	Val	Ser	Ser	Ile	Phe
				325					330					335	
Val															

995

&lt;210&gt; 1022

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1022

Ala Ser Ala Glu Phe Glu Met Ala Gly Gly Lys Ala Gly Lys Asp Ser  
1 5 10 15

Gly Lys Ala Lys Thr Lys Ala Val Ser Arg Ser Gln Arg Ala Gly Leu  
20 25 30

Gln Phe Pro Val Gly Arg Ile His Arg His Leu Lys Ser Arg Thr Thr  
35 40 45

Ser His Gly Arg Val Gly Ala Thr Ala Ala Val Tyr Ser Ala Ala Ile  
50 55 60

Leu Glu Tyr Leu Thr Ala Glu Val Leu Glu Leu Ala Gly Asn Ala Ser  
65 70 75 80

Lys Asp Leu Lys Val Lys Arg Ile Thr Pro Arg His Leu Gln Leu Ala  
85 90 95

Ile Arg Gly Asp Glu Glu Leu Asp Ser Leu Ile Lys Ala Thr Ile Ala  
100 105 110

Gly Gly Gly Val Ile Pro His Ile His Lys Ser Leu Ile Gly Lys Lys  
115 120 125

Gly Gln Gln Lys Thr Val  
130

&lt;210&gt; 1023

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (33)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (67)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1023.

Gly Leu Phe Gln Thr Cys Ile His Leu Leu Thr Leu Pro Val Leu Val  
 1 5 10 15

His Gly Glu Leu Phe Ala Pro Pro Arg Trp Leu Arg Arg Ala Ala Gly  
 20 25 30

Xaa Pro Trp Thr Leu Val Thr Ser Cys Xaa Ser Leu Arg Pro Ser Gly  
 35 40 45

Pro Cys Pro Arg Pro Gly Arg Ala Leu Leu Pro Ser Cys Ala Pro Ala  
 50 55 60

Ala Arg Xaa Pro Trp Gly Gly Val Val Trp Cys Trp Glu Gly Val Leu  
 65 70 75 80

Gln Gly Glu Glu Asp Leu Glu Gly Leu Gly Ala Ala Val Leu Asn Arg  
 85 90 95

Leu Thr Leu Arg Arg Pro Leu Ser Ala Ala Leu Leu Phe Ile Thr Val  
 100 105 110

Pro His Ser Gly Arg Arg Ser Pro Val Ala Gly Gln Val Pro Met Ala  
 115 120 125

Cys Ser Leu Glu Pro Asp Phe Arg Cys Phe Gly Ile Arg Ser Pro Gln  
 130 135 140

His Arg Gln Val His Pro Ile Ile Thr Leu Pro Val Pro Gly Trp Ala  
 145 150 155 160

Gly Asp Ser Gly Thr Val Met Pro Gly Ala Arg Thr Ala Ala Leu Pro  
 165 170 175

Leu His Thr Asp Gly Leu Gly Val Ala Leu Arg Pro His Pro Thr Leu  
 180 185 190

Ile Ser Gly Arg Gly Ser Pro Glu Trp Ser Leu Val Arg Ala Val Ala  
 195 200 205

Lys Pro Ala Val Ser Phe Leu His Lys Val Pro Pro Pro Leu Ser Val  
 210 215 220

Ser Gly  
 225

997

&lt;210&gt; 1024

&lt;211&gt; 760

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (330)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1024

Gln Gly Lys Lys Arg Ala Gly Asn Phe Ala Ile Met Glu Ile Gln Cys  
 1 5 10 15

Pro Ala Leu Arg Lys Thr Leu Pro Ile Leu Phe Gly Ser Leu Arg Arg  
 20 25 30

Cys Leu Cys Leu Ser Asp Lys Tyr Ser Gln Ala Cys His Pro Leu Gly  
 35 40 45

Ser Lys Val Arg Arg Cys Arg Lys Pro Gly Pro Arg Asp Arg Gln Leu  
 50 55 60

Thr Arg Val Asp Lys Ser Pro Glu Met Trp Cys Ile Val Leu Phe Ser  
 65 70 75 80

Leu Leu Ala Trp Val Tyr Ala Glu Pro Thr Met Tyr Gly Glu Ile Leu  
 85 90 95

Ser Pro Asn Tyr Pro Gln Ala Tyr Pro Ser Glu Val Glu Lys Ser Trp  
 100 105 110

Asp Ile Glu Val Pro Glu Gly Tyr Gly Ile His Leu Tyr Phe Thr His  
 115 120 125

Leu Asp Ile Glu Leu Ser Glu Asn Cys Ala Tyr Asp Ser Val Gln Ile  
 130 135 140

Ile Ser Gly Asp Thr Glu Glu Gly Arg Leu Cys Gly Gln Arg Ser Ser  
 145 150 155 160

Asn Asn Pro His Ser Pro Ile Val Glu Glu Phe Gln Val Pro Tyr Asn  
 165 170 175

Lys Leu Gln Val Ile Phe Lys Ser Asp Phe Ser Asn Glu Glu Arg Phe  
 180 185 190

Thr Gly Phe Ala Ala Tyr Tyr Val Ala Thr Asp Ile Asn Glu Cys Thr  
 195 200 205

Asp Phe Val Asp Val Pro Cys Ser His Phe Cys Asn Asn Phe Ile Gly  
 210 215 220

Gly Tyr Phe Cys Ser Cys Pro Pro Glu Tyr Phe Leu His Asp Asp Met  
 225 230 235 240

Lys Asn Cys Gly Val Asn Cys Ser Gly Asp Val Phe Thr Ala Leu Ile  
 245 250 255

Gly Glu Ile Ala Ser Pro Asn Tyr Pro Lys Pro Tyr Pro Glu Asn Ser  
 260 265 270

Arg Cys Glu Tyr Gln Ile Arg Leu Glu Lys Gly Phe Gln Val Val Val  
 275 280 285

Thr Leu Arg Arg Glu Asp Phe Asp Val Glu Ala Ala Asp Ser Ala Gly  
 290 295 300

Asn Cys Leu Asp Ser Leu Val Phe Val Ala Gly Asp Arg Gln Phe Gly  
 305 310 315 320

Pro Tyr Cys Gly His Gly Phe Pro Gly Xaa Leu Asn Ile Glu Thr Lys  
 325 330 335

Ser Asn Ala Leu Asp Ile Ile Phe Gln Thr Asp Leu Thr Gly Gln Lys  
 340 345 350

Lys Gly Trp Lys Leu Arg Tyr His Gly Asp Pro Met Pro Cys Pro Lys  
 355 360 365

Glu Asp Thr Pro Asn Ser Val Trp Glu Pro Ala Lys Ala Lys Tyr Val  
 370 375 380

Phe Arg Asp Val Val Gln Ile Thr Cys Leu Asp Gly Phe Glu Val Val  
 385 390 395 400

Glu Gly Arg Val Gly Ala Thr Ser Phe Tyr Ser Thr Cys Gln Ser Asn  
 405 410 415

Gly Lys Trp Ser Asn Ser Lys Leu Lys Cys Gln Pro Val Asp Cys Gly  
 420 425 430

Ile Pro Glu Ser Ile Glu Asn Gly Lys Val Glu Asp Pro Glu Ser Thr  
 435 440 445

Leu Phe Gly Ser Val Ile Arg Tyr Thr Cys Glu Glu Pro Tyr Tyr Tyr  
 450 455 460

Met Glu Asn Gly Gly Gly Gly Glu Tyr His Cys Ala Gly Asn Gly Ser  
 465 470 475 480



999

Trp Val Asn Glu Val Leu Gly Pro Glu Leu Pro Lys Cys Val Pro Val  
 485 490 495

Cys Gly Val Pro Arg Glu Pro Phe Glu Glu Lys Gln Arg Ile Ile Gly  
 500 505 510

Gly Ser Asp Ala Asp Ile Lys Asn Phe Pro Trp Gln Val Phe Phe Asp  
 515 520 525

Asn Pro Trp Ala Gly Gly Ala Leu Ile Asn Glu Tyr Trp Val Leu Thr  
 530 535 540

Ala Ala His Val Val Glu Gly Asn Arg Glu Pro Thr Met Tyr Val Gly  
 545 550 555 560

Ser Thr Ser Val Gln Thr Ser Arg Leu Ala Lys Ser Lys Met Leu Thr  
 565 570 575

Pro Glu His Val Phe Ile His Pro Gly Trp Lys Leu Leu Glu Val Pro  
 580 585 590

Glu Gly Arg Thr Asn Phe Asp Asn Asp Ile Ala Leu Val Arg Leu Lys  
 595 600 605

Asp Pro Val Lys Met Gly Pro Thr Val Ser Pro Ile Cys Leu Pro Gly  
 610 615 620

Thr Ser Ser Asp Tyr Asn Leu Met Asp Gly Asp Leu Gly Leu Ile Ser  
 625 630 635 640

Gly Trp Gly Arg Thr Glu Lys Arg Asp Arg Ala Val Arg Leu Lys Ala  
 645 650 655

Ala Arg Leu Pro Val Ala Pro Leu Arg Lys Cys Lys Glu Val Lys Val  
 660 665 670

Glu Lys Pro Thr Ala Asp Ala Glu Ala Tyr Val Phe Thr Pro Asn Met  
 675 680 685

Ile Cys Ala Gly Gly Glu Lys Gly Met Asp Ser Cys Lys Gly Asp Ser  
 690 695 700

Gly Gly Ala Phe Ala Val Gln Asp Pro Asn Asp Lys Thr Lys Phe Tyr  
 705 710 715 720

Ala Ala Gly Leu Val Ser Trp Gly Pro Gln Cys Gly Thr Tyr Gly Leu  
 725 730 735

Tyr Thr Arg Val Lys Asn Tyr Val Asp Trp Ile Met Lys Thr Met Gln  
 740 745 750

1000

Glu Asn Ser Thr Pro Arg Glu Asp  
755 760

&lt;210&gt; 1025

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (115)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (139)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids.

&lt;400&gt; 1025

Gly Gly Gly Arg Leu Arg Arg Arg Arg Ser Gly Ser Pro Gly Trp Arg  
1 5 10 15

Ala Pro Arg Thr Gly Met Leu Leu Gly Leu Ala Ala Met Glu Leu Lys  
20 25 30

Val Trp Val Asp Gly Ile Gln Arg Val Val Cys Gly Val Ser Glu Gln  
35 40 45

Thr Thr Cys Gln Glu Val Val Ile Ala Leu Ala Gln Ala Ile Gly Gln  
50 55 60

Thr Gly Arg Phe Val Leu Val Gln Arg Leu Arg Glu Lys Glu Arg Gln  
65 70 75 80

Leu Leu Pro Gln Glu Cys Pro Val Gly Ala Gln Ala Thr Cys Gly Gln  
85 90 95

Phe Ala Ser Asp Val Gln Phe Val Leu Arg Arg Thr Gly Pro Ser Leu  
100 105 110

Ala Gly Xaa Pro Ser Ser Asp Ser Cys Pro Pro Pro Glu Arg Cys Leu  
115 120 125

Ile Arg Ala Ser Leu Pro Val Lys Pro Arg Xaa Ala Leu Gly Cys Glu  
130 135 140

Pro Arg Lys Thr Leu Thr Pro Glu Pro Ala Pro Ser Leu Ser Arg Pro  
145 150 155 160

1001

Gly Pro Ala Ala Cys Glu His Pro His Gln Ala Ala Ala Gln Thr Cys  
165 170 175

Gly Ala Trp Ser Ser Gly Cys Arg Gly Met Leu Arg Ser Trp Ala Met  
180 185 190

Arg Pro Ser Gly Ser Lys Ser Cys Ala Gly Ser Arg Pro Gly Ser Glu  
195 200 205

Arg Asp Arg His Ala Cys Arg His  
210 215

<210> 1026

<211> 604

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (303)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (359)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1026

Gly Thr Ser Ser Asp Ile Leu Lys Gly Asn Phe Ser Ile Arg Thr Ala  
1 5 10 15

Lys Met Gln Gln His Val Cys Glu Thr Ile Ile Arg Ile Phe Lys Arg  
20 25 30

His Gly Ala Val Gln Leu Cys Thr Pro Leu Leu Leu Pro Arg Asn Arg  
35 40 45

Gln Ile Tyr Glu His Asn Glu Ala Ala Leu Phe Met Asp His Ser Gly  
50 55 60

Met Leu Val Met Leu Pro Phe Asp Leu Arg Ile Pro Phe Ala Arg Tyr  
65 70 75 80

Val Ala Arg Asn Asn Ile Leu Asn Leu Lys Arg Tyr Cys Ile Glu Arg  
85 90 95

Val Phe Arg Pro Arg Lys Leu Asp Arg Phe His Pro Lys Glu Leu Leu  
100 105 110

1002

Glu Cys Ala Phe Asp Ile Val Thr Ser Thr Thr Asn Ser Phe Leu Pro  
 115 120 125  
 Thr Ala Glu Ile Ile Tyr Thr Ile Tyr Glu Ile Ile Gln Glu Phe Pro  
 130 135 140  
 Ala Leu Gln Glu Arg Asn Tyr Ser Ile Tyr Leu Asn His Thr Met Leu  
 145 150 155 160  
 Leu Lys Ala Ile Leu Leu His Cys Gly Ile Pro Glu Asp Lys Leu Ser  
 165 170 175  
 Gln Val Tyr Ile Ile Leu Tyr Asp Ala Val Thr Glu Lys Leu Thr Arg  
 180 185 190  
 Arg Glu Val Glu Ala Lys Phe Cys Asn Leu Ser Leu Ser Ser Asn Ser  
 195 200 205  
 Leu Cys Arg Leu Tyr Lys Phe Ile Glu Gln Lys Gly Asp Leu Gln Asp  
 210 215 220  
 Leu Met Pro Thr Ile Asn Ser Leu Ile Lys Gln Lys Thr Gly Ile Ala  
 225 230 235 240  
 Gln Leu Val Lys Tyr Gly Leu Lys Asp Leu Glu Glu Val Val Gly Leu  
 245 250 255  
 Leu Lys Lys Leu Gly Ile Lys Leu Gln Val Leu Ile Asn Leu Gly Leu  
 260 265 270  
 Val Tyr Lys Val Gln Gln His Asn Gly Ile Ile Phe Gln Phe Val Ala  
 275 280 285  
 Phe Ile Lys Arg Arg Gln Arg Ala Val Pro Glu Ile Leu Ala Xaa Gly  
 290 295 300  
 Gly Arg Tyr Asp Leu Leu Ile Pro Gln Phe Arg Gly Pro Gln Ala Leu  
 305 310 315 320  
 Gly Pro Val Pro Thr Ala Ile Gly Val Ser Ile Ala Ile Asp Lys Ile  
 325 330 335  
 Ser Ala Ala Val Leu Asn Met Glu Glu Ser Val Thr Ile Ser Ser Cys  
 340 345 350  
 Asp Leu Leu Val Val Ser Xaa Gly Gln Met Ser Met Ser Arg Ala Ile  
 355 360 365  
 Asn Leu Thr Gln Lys Leu Trp Thr Ala Gly Ile Thr Ala Glu Ile Met  
 370 375 380

1003

Tyr Asp Trp Ser Gln Ser Gln Glu Glu Leu Gln Glu Tyr Cys Arg His  
385 390 395 400

His Glu Ile Thr Tyr Val Ala Leu Val Ser Asp Lys Glu Gly Ser His  
405 410 415

Val Lys Val Lys Ser Phe Glu Lys Glu Arg Gln Thr Glu Lys Arg Val  
420 425 430

Leu Glu Thr Glu Leu Val Asp His Val Leu Gln Lys Leu Arg Thr Lys  
435 440 445

Val Thr Asp Glu Arg Asn Gly Arg Glu Ala Ser Asp Asn Leu Ala Val  
450 455 460

Gln Asn Leu Lys Gly Ser Phe Ser Asn Ala Ser Gly Leu Phe Glu Ile  
465 470 475 480

His Gly Ala Thr Val Val Pro Ile Val Ser Val Leu Ala Pro Glu Lys  
485 490 495

Leu Ser Ala Ser Thr Arg Arg Arg Tyr Glu Thr Gln Val Gln Thr Arg  
500 505 510

Leu Gln Thr Ser Leu Ala Asn Leu His Gln Lys Ser Ser Glu Ile Glu  
515 520 525

Ile Leu Ala Val Asp Leu Pro Lys Glu Thr Ile Leu Gln Phe Leu Ser  
530 535 540

Leu Glu Trp Asp Ala Asp Glu Gln Ala Phe Asn Thr Thr Val Lys Gln  
545 550 555 560

Leu Leu Ser Arg Leu Pro Lys Gln Arg Tyr Leu Lys Leu Val Cys Asp  
565 570 575

Glu Ile Tyr Asn Ile Lys Val Glu Lys Lys Val Ser Val Leu Phe Leu  
580 585 590

Tyr Ser Tyr Arg Asp Asp Tyr Tyr Arg Ile Leu Phe  
595 600

&lt;210&gt; 1027

&lt;211&gt; 459

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

1004

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1027.

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Thr Ser Cys Gly Ile Asn Thr Lys Phe Thr Ser Lys Glu Pro Ile Phe
  1                      5                      10                      15

Leu Thr Gln Leu Leu His Phe Ser Asn Leu Xaa Gln Glu Tyr Lys Ile
      20                      25                      30

Asn Ser Arg Leu Leu Gln Asn Ile Leu Asp Ala Gly Phe Gln Met Pro
      35                      40                      45

Thr Pro Ile Gln Met Gln Ala Ile Pro Val Met Leu His Gly Arg Glu
      50                      55                      60

Leu Leu Ala Ser Ala Pro Thr Gly Ser Gly Lys Thr Leu Ala Phe Ser
      65                      70                      75                      80

Ile Pro Ile Leu Met Gln Leu Lys Gln Pro Ala Asn Lys Gly Phe Arg
      85                      90                      95

Ala Leu Ile Ile Ser Pro Thr Arg Glu Leu Ala Ser Gln Ile His Arg
      100                      105                      110

Glu Leu Ile Lys Ile Ser Glu Gly Thr Gly Phe Arg Ile His Met Ile
      115                      120                      125

His Lys Ala Ala Val Ala Ala Lys Lys Phe Gly Pro Lys Ser Ser Lys
      130                      135                      140

Lys Phe Asp Ile Leu Val Thr Thr Pro Asn Arg Leu Ile Tyr Leu Leu
      145                      150                      155                      160

Lys Gln Asp Pro Pro Gly Ile Asp Leu Ala Ser Val Glu Trp Leu Val
      165                      170                      175

Val Asp Glu Ser Asp Lys Leu Phe Glu Asp Gly Lys Thr Gly Phe Arg
      180                      185                      190

Asp Gln Leu Ala Ser Ile Phe Leu Ala Cys Thr Ser His Lys Val Arg
      195                      200                      205

Arg Ala Met Phe Ser Ala Thr Phe Ala Tyr Asp Val Glu Gln Trp Cys
      210                      215                      220

Lys Leu Asn Leu Asp Asn Val Ile Ser Val Ser Ile Gly Ala Arg Asn
      225                      230                      235                      240

Ser Ala Val Glu Thr Val Glu Gln Glu Leu Leu Phe Val Gly Ser Glu

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1005

245                      250                      255  
 Thr Gly Lys Leu Leu Ala Val Arg Glu Leu Val Lys Lys Gly Phe Asn  
                          260                      265                      270  
 Pro Pro Val Leu Val Phe Val Gln Ser Ile Glu Arg Ala Lys Glu Leu  
                          275                      280                      285  
 Phe His Glu Leu Ile Tyr Glu Gly Ile Asn Val Asp Val Ile His Ala  
                          290                      295                      300  
 Glu Arg Thr Gln Gln Gln Arg Asp Asn Thr Val His Ser Phe Arg Ala  
                          305                      310                      315                      320  
 Gly Lys Ile Trp Val Leu Ile Cys Thr Ala Leu Leu Ala Arg Gly Ile  
                          325                      330                      335  
 Asp Phe Lys Gly Val Asn Leu Val Ile Asn Tyr Asp Phe Pro Thr Ser  
                          340                      345                      350  
 Ser Val Glu Tyr Ile His Arg Ile Gly Arg Thr Gly Arg Ala Gly Asn  
                          355                      360                      365  
 Lys Gly Lys Ala Ile Thr Phe Phe Thr Glu Asp Asp Lys Pro Leu Leu  
                          370                      375                      380  
 Arg Ser Val Ala Asn Val Ile Gln Gln Ala Gly Cys Pro Val Pro Glu  
                          385                      390                      395                      400  
 Tyr Ile Lys Gly Phe Gln Lys Leu Leu Ser Lys Gln Lys Lys Lys Met  
                          405                      410                      415  
 Ile Lys Lys Pro Leu Glu Arg Glu Ser Ile Ser Thr Thr Pro Lys Cys  
                          420                      425                      430  
 Phe Leu Glu Lys Ala Lys Asp Lys Gln Lys Lys Val Thr Gly Gln Asn  
                          435                      440                      445  
 Ser Lys Lys Lys Val Ala Leu Glu Asp Lys Ser  
                          450                      455

&lt;210&gt; 1028

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1028

Gln Arg Gly Phe Tyr Ala Asn Ala Leu Thr Ser Ala Leu Gly Asn Glu  
 1                      5                      10                      15

1006

Arg Val Thr Ser Ala Ser Ser Leu Ala Ser Phe Leu Val Leu Glu Arg  
20 25 30

Leu Thr Asn Val Cys His Ser His Lys Cys Phe Glu Leu Asp Leu Cys  
35 40 45

Asp Leu Cys Phe Phe Ser Phe Ser Leu Glu Ser Glu Tyr His Cys Leu  
50 55 60

Pro Pro Arg Ser  
65

<210> 1029

<211> 215

<212> PRT

<213> Homo sapiens

<400> 1029

Tyr Pro Leu Thr Pro Ala Pro Ala Pro His Asp Pro Ser Pro Arg Ala  
1 5 10 15

His Gly Arg Gly Asp Asp Val Thr Gln Ala Thr Ala Leu Thr Ser His  
20 25 30

Ile Thr Val Val Met Ala Ser Arg Gly His Val Asp Val Thr Lys Arg  
35 40 45

Tyr Ser Asp Gly Val Val Gln Met Gln His Val Ala His Arg His Gly  
50 55 60

Glu Leu Gly Met Thr Ser His Arg Asp Ala Ala Thr Thr Ser Arg Ala  
65 70 75 80

Met Ser Thr Ser His Ile Leu Met Ser His Arg Arg Gly Asp Gly Ile  
85 90 95

Thr Gln Thr Val Met Met Ser His Thr Asp Thr Val Thr Thr Thr  
100 105 110

Met Thr Thr Thr Pro Ile Asp Met Ala Pro Thr Ser His Ala Arg Met  
115 120 125

Pro Phe His Thr His Phe Leu Pro Asn Ser His Leu Val Ser Arg Ser  
130 135 140

Pro Asp Pro Gly Thr Arg Ala Lys Val Pro Thr Gly Ser His Pro Leu  
145 150 155 160



1007

Pro His Ser Pro Gly Pro Gln His Leu Pro Ser Ser Ser Phe Leu Ala  
165 170 175

Ser Gln Pro Leu Pro His Pro Gln Cys Leu Asp Pro Glu Val Arg Thr  
180 185 190

Gly Ser His Ser Pro Pro Leu Leu Glu Arg Glu Cys Phe Gln Asp Pro  
195 200 205

Leu Gly Ala Leu Ser Arg Gly  
210 215

<210> 1030  
<211> 297  
<212> PRT  
<213> Homo sapiens

<400> 1030  
Lys Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg  
1 5 10 15

Val Arg Pro Arg Val Arg Pro Arg Val Arg Trp Thr Ala Ala Met Arg  
20 25 30

Leu Thr Val Leu Cys Ala Val Cys Leu Leu Pro Gly Ser Leu Ala Leu  
35 40 45

Pro Leu Pro Gln Glu Ala Gly Gly Met Ser Glu Leu Gln Trp Glu Gln  
50 55 60

Ala Gln Asp Tyr Leu Lys Arg Phe Tyr Leu Tyr Asp Ser Glu Thr Lys  
65 70 75 80

Asn Ala Asn Ser Leu Glu Ala Lys Leu Lys Glu Met Gln Lys Phe Phe  
85 90 95

Gly Leu Pro Ile Thr Gly Met Leu Asn Ser Arg Val Ile Glu Ile Met  
100 105 110

Gln Lys Pro Arg Cys Gly Val Pro Asp Val Ala Glu Tyr Ser Leu Phe  
115 120 125

Pro Asn Ser Pro Lys Trp Thr Ser Lys Val Val Thr Tyr Arg Ile Val  
130 135 140

Ser Tyr Thr Arg Asp Leu Pro His Ile Thr Val Asp Arg Leu Val Ser  
145 150 155 160

Lys Ala Leu Asn Met Trp Gly Lys Glu Ile Pro Leu His Phe Arg Lys

1008

165                      170                      175  
 Val Val Trp Gly Thr Ala Asp Ile Met Ile Gly Phe Ala Arg Gly Ala  
                          180                      185                      190  
 His Gly Asp Ser Tyr Pro Phe Asp Gly Pro Gly Asn Thr Leu Ala His  
                          195                      200                      205  
 Ala Phe Ala Pro Gly Thr Gly Leu Gly Gly Asp Ala His Phe Asp Glu  
                          210                      215                      220  
 Asp Glu Arg Trp Thr Asp Gly Ser Ser Leu Gly Ile Asn Phe Leu Tyr  
                          225                      230                      235                      240  
 Ala Ala Thr His Glu Leu Gly His Ser Leu Gly Met Gly His Ser Ser  
                          245                      250                      255  
 Asp Pro Asn Ala Val Met Tyr Pro Thr Tyr Gly Asn Gly Asp Pro Gln  
                          260                      265                      270  
 Asn Phe Lys Leu Ser Gln Asp Asp Ile Lys Gly Ile Gln Lys Leu Tyr  
                          275                      280                      285  
 Gly Lys Arg Ser Asn Ser Arg Lys Lys  
                          290                      295

&lt;210&gt; 1031

&lt;211&gt; 571

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (81)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (484)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1031

Arg Val Arg Ser Lys Val Pro Arg Cys Val Asn Thr Gln Pro Gly Phe  
   1                      5                      10                      15

1009

His Cys Leu Pro Cys Pro Pro Arg Tyr Arg Gly Asn Gln Pro Val Gly  
                   20                                  25                                  30

Val Gly Leu Glu Ala Ala Lys Thr Glu Lys Gln Xaa Cys Glu Pro Glu  
                   35                                  40                                  45

Asn Pro Cys Lys Asp Lys Thr His Asn Cys His Lys His Ala Glu Cys  
                   50                                  55                                  60

Ile Tyr Leu Gly His Phe Ser Asp Pro Met Tyr Lys Cys Glu Cys Gln  
                   65                                  70                                  75                                  80

Xaa Gly Tyr Ala Gly Asp Gly Leu Ile Cys Gly Glu Asp Ser Asp Leu  
                                   85                                  90                                  95

Asp Gly Trp Pro Asn Leu Asn Leu Val Cys Ala Thr Asn Ala Thr Tyr  
                                   100                                  105                                  110

His Cys Ile Lys Asp Asn Cys Pro His Leu Pro Asn Ser Gly Gln Glu  
                   115                                  120                                  125

Asp Phe Asp Lys Asp Gly Ile Gly Asp Ala Cys Asp Asp Asp Asp Asp  
                   130                                  135                                  140

Asn Asp Gly Val Thr Asp Glu Lys Asp Asn Cys Gln Leu Leu Phe Asn  
                   145                                  150                                  155                                  160

Pro Arg Gln Ala Asp Tyr Asp Lys Asp Glu Val Gly Asp Arg Cys Asp  
                                   165                                  170                                  175

Asn Cys Pro Tyr Val His Asn Pro Ala Gln Ile Asp Thr Asp Asn Asn  
                                   180                                  185                                  190

Gly Glu Gly Asp Ala Cys Ser Val Asp Ile Asp Gly Asp Asp Val Phe  
                   195                                  200                                  205

Asn Glu Arg Asp Asn Cys Pro Tyr Val Tyr Asn Thr Asp Gln Arg Asp  
                   210                                  215                                  220

Thr Asp Gly Asp Gly Val Gly Asp His Cys Asp Asn Cys Pro Leu Val  
                   225                                  230                                  235                                  240

His Asn Pro Asp Gln Thr Asp Val Asp Asn Asp Leu Val Gly Asp Gln  
                                   245                                  250                                  255

Cys Asp Asn Asn Glu Asp Ile Asp Asp Asp Gly His Gln Asn Asn Gln  
                                   260                                  265                                  270

Asp Asn Cys Pro Tyr Ile Ser Asn Ala Asn Gln Ala Asp His Asp Arg  
                   275                                  280                                  285

1010

Asp Gly Gln Gly Asp Ala Cys Asp Pro Asp Asp Asp Asn Asp Gly Val  
 290 295 300

Pro Asp Asp Arg Asp Asn Cys Arg Leu Val Phe Asn Pro Asp Gln Glu  
 305 310 315 320

Asp Leu Asp Gly Asp Gly Arg Gly Asp Ile Cys Lys Asp Asp Phe Asp  
 325 330 335

Asn Asp Asn Ile Pro Asp Ile Asp Asp Val Cys Pro Glu Asn Asn Ala  
 340 345 350

Ile Ser Glu Thr Asp Phe Arg Asn Phe Gln Met Val Pro Leu Asp Pro  
 355 360 365

Lys Gly Thr Thr Gln Ile Asp Pro Asn Trp Val Ile Arg His Gln Gly  
 370 375 380

Lys Glu Leu Val Gln Thr Ala Asn Ser Asp Pro Gly Ile Ala Val Gly  
 385 390 395 400

Phe Asp Glu Phe Gly Ser Val Asp Phe Ser Gly Thr Phe Tyr Val Asn  
 405 410 415

Thr Asp Arg Asp Asp Asp Tyr Ala Gly Phe Val Phe Gly Tyr Gln Ser  
 420 425 430

Ser Ser Arg Phe Tyr Val Val Met Trp Lys Gln Val Thr Gln Thr Tyr  
 435 440 445

Trp Glu Asp Gln Pro Thr Arg Ala Tyr Gly Tyr Ser Gly Val Ser Leu  
 450 455 460

Lys Val Val Asn Ser Thr Thr Gly Thr Gly Glu His Leu Arg Asn Ala  
 465 470 475 480

Leu Trp His Xaa Gly Asn Thr Pro Gly Gln Val Arg Thr Leu Trp His  
 485 490 495

Asp Pro Arg Asn Ile Gly Trp Lys Asp Tyr Thr Ala Tyr Arg Trp His  
 500 505 510

Leu Thr His Arg Pro Lys Thr Gly Tyr Ile Arg Val Leu Val His Glu  
 515 520 525

Gly Lys Gln Val Met Ala Asp Ser Gly Pro Ile Tyr Asp Gln Thr Tyr  
 530 535 540

Ala Gly Gly Arg Leu Gly Leu Phe Val Phe Ser Gln Glu Met Val Tyr  
 545 550 555 560

1011

Phe Ser Asp Leu Lys Tyr Glu Cys Arg Asp Ile  
565 570

<210> 1032  
<211> 114  
<212> PRT  
<213> Homo sapiens

<400> 1032  
Gly Arg Gly Thr Ala Thr Phe Pro Thr Gly His Glu Phe Val Gly Pro  
1 5 10 15  
Cys Leu Gly Arg Ala Glu Ala Phe Trp Arg Ser Lys Met Gly Arg Lys  
20 25 30  
Asp Ala Ala Thr Ile Lys Leu Pro Val Asp Gln Tyr Arg Lys Gln Ile  
35 40 45  
Gly Lys Gln Asp Tyr Lys Lys Thr Lys Pro Ile Leu Arg Ala Thr Lys  
50 55 60  
Leu Lys Ala Glu Ala Lys Lys Thr Ala Ile Gly Ile Lys Glu Val Gly  
65 70 75 80  
Leu Val Leu Ala Ala Ile Leu Ala Leu Leu Leu Ala Phe Tyr Ala Phe  
85 90 95  
Phe Tyr Leu Arg Leu Thr Thr Asp Val Asp Pro Asp Leu Asp Gln Asp  
100 105 110  
Glu Asp

<210> 1033  
<211> 243  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (88)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (101)

1012

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1033

His Arg Arg Asp Glu Ala Leu Gln Ser Leu Arg Phe Arg Arg Arg Pro  
 1 5 10 15  
 Gly Ala Gln Ala Ala Asp Ala Cys Gly Pro Arg Ala Asp Leu Gly Gly  
 20 25 30  
 Pro Arg Glu Pro Ala Ala Gly Gly Arg Ala Ala Trp His Arg Pro Ala  
 35 40 45  
 Ala Arg Gly Gln Ser Pro Arg Arg Cys His Ala Gly Val His Arg Ser  
 50 55 60  
 Gln Cys His Leu Cys Arg Leu Gly Ala Ala Glu Arg Phe Arg Gly Ile  
 65 70 75 80  
 Val Ala Leu Leu Ala Ser Arg Xaa Leu Leu Arg Pro Pro Leu His Trp  
 85 90 95  
 Val Leu Leu Ala Xaa Ala Leu Val Asn Leu Leu Leu Ser Val Ala Cys  
 100 105 110  
 Ser Leu Gly Leu Leu Leu Ala Val Ser Leu Thr Val Ala Asn Gly Gly  
 115 120 125  
 Arg Arg Leu Ile Ala Asp Cys His Pro Gly Leu Leu Asp Pro Leu Val  
 130 135 140  
 Pro Leu Asp Glu Gly Pro Gly His Thr Asp Cys Pro Phe Asp Pro Thr  
 145 150 155 160  
 Arg Ile Tyr Asp Thr Ala Leu Ala Leu Trp Ile Pro Ser Leu Leu Met  
 165 170 175  
 Ser Ala Gly Glu Ala Ala Leu Ser Gly Tyr Cys Cys Val Ala Ala Leu  
 180 185 190  
 Thr Leu Arg Gly Val Gly Pro Cys Arg Lys Asp Gly Leu Gln Gly Gln  
 195 200 205  
 Leu Glu Glu Met Thr Glu Leu Glu Ser Pro Lys Cys Lys Arg Gln Glu  
 210 215 220  
 Asn Glu Gln Leu Leu Asp Gln Asn Gln Glu Ile Arg Ala Ser Gln Arg  
 225 230 235 240  
 Ser Trp Val

1013

&lt;210&gt; 1034

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1034

```

Tyr Thr Trp His Ser Glu Lys Met Asp Leu Lys Asp Lys Asn Gly Gly
 1             5             10             15

Pro Gly Arg Cys Asn Ser His Arg Leu Lys Val Ser Ser Gly Leu Cys
      20             25             30

Lys Thr His Glu Ile Gly Phe Asp Pro Leu Ala Leu Lys Cys Pro Leu
      35             40             45

Arg Ser Arg Thr Ala Pro Trp Trp Pro Leu Asp Arg Val Ser Phe Asp
      50             55             60

Leu His His Leu Val Ile Gly Asn Phe Phe Val Gly Asn Arg Lys Ile
      65             70             75             80

Phe Leu Asp Tyr Leu Val Tyr Gly Phe Ala His Asn Asn Arg Trp Lys
      85             90             95

Leu Leu Val Gln Ser Trp Ser Asp Gly Cys Val His Arg Thr Phe Gly
      100            105            110

Leu Val Lys Ser Phe Ser Lys Ala Ser Phe Cys Ile Phe Ile Thr Lys
      115            120            125

Gln Arg Lys Ser Ser Glu Asp Leu Ala Leu Lys Gln Ile Cys Ala Asn
      130            135            140

Thr Ala Arg Val Ile Leu Lys Leu Lys His Phe His Phe Val Ser Tyr
      145            150            155            160

Met Cys Thr Phe Leu Phe Thr Cys Glu Asn Gly His Leu
      165            170

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&lt;210&gt; 1035

&lt;211&gt; 241

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1035

```

Ser Phe Ser Glu Met Ala Gly Val Ser Ala Cys Ile Lys Tyr Ser Met
 1             5             10             15

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1014

Phe Thr Phe Asn Phe Leu Phe Trp Leu Cys Gly Ile Leu Ile Leu Ala  
                   20                                  25                                  30  
 Leu Ala Ile Trp Val Arg Val Ser Asn Asp Ser Gln Ala Ile Phe Gly  
                   35                                  40                                  45  
 Ser Glu Asp Val Gly Ser Ser Ser Tyr Val Ala Val Asp Ile Leu Ile  
                   50                                  55                                  60  
 Ala Val Gly Ala Ile Ile Met Ile Leu Gly Phe Leu Gly Cys Cys Gly  
                   65                                  70                                  75                                  80  
 Ala Ile Lys Glu Ser Arg Cys Met Leu Leu Leu Phe Phe Ile Gly Leu  
                                   85                                  90                                  95  
 Leu Leu Ile Leu Leu Leu Gln Val Ala Thr Gly Ile Leu Gly Ala Val  
                                   100                                  105                                  110  
 Phe Lys Ser Lys Ser Asp Arg Ile Val Asn Glu Thr Leu Tyr Glu Asn  
                   115                                  120                                  125  
 Thr Lys Leu Leu Ser Ala Thr Gly Glu Ser Glu Lys Gln Phe Gln Glu  
                   130                                  135                                  140  
 Ala Ile Ile Val Phe Gln Glu Glu Phe Lys Cys Cys Gly Leu Val Asn  
                   145                                  150                                  155                                  160  
 Gly Ala Ala Asp Trp Gly Asn Asn Phe Gln His Tyr Pro Glu Leu Cys  
                                   165                                  170                                  175  
 Ala Cys Leu Asp Lys Gln Arg Pro Cys Gln Ser Tyr Asn Gly Lys Gln  
                   180                                  185                                  190  
 Val Tyr Lys Glu Thr Cys Ile Ser Phe Ile Lys Asp Phe Leu Ala Lys  
                   195                                  200                                  205  
 Asn Leu Ile Ile Val Ile Gly Ile Ser Phe Gly Leu Ala Val Ile Glu  
                   210                                  215                                  220  
 Ile Leu Gly Leu Val Phe Ser Met Val Leu Tyr Cys Gln Ile Gly Asn  
                   225                                  230                                  235                                  240  
 Lys

&lt;210&gt; 1036

&lt;211&gt; 335

&lt;212&gt; PRT



1015

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1036

```

Pro Thr Xaa Gly Arg Ala Glu Glu Ala Lys Met Ala Ala Ala Ala Ala
 1             5             10             15

Ser Leu Arg Gly Val Val Leu Gly Pro Arg Gly Ala Gly Leu Pro Gly
          20             25             30

Ala Arg Ala Arg Gly Leu Leu Cys Ser Ala Arg Pro Gly Gln Leu Pro
          35             40             45

Leu Arg Thr Pro Gln Ala Val Ala Leu Ser Ser Lys Ser Gly Leu Ser
          50             55             60

Arg Gly Arg Lys Val Met Leu Ser Ala Leu Gly Met Leu Ala Ala Gly
          65             70             75             80

Gly Ala Gly Leu Ala Val Ala Leu His Ser Ala Val Ser Ala Ser Asp
          85             90             95

Leu Glu Leu His Pro Pro Ser Tyr Pro Trp Ser His Arg Gly Leu Leu
          100            105            110

Ser Ser Leu Asp His Thr Ser Ile Arg Arg Gly Phe Gln Val Tyr Lys
          115            120            125

Gln Val Cys Ala Ser Cys His Ser Met Asp Phe Val Ala Tyr Arg His
          130            135            140

Leu Val Gly Val Cys Tyr Thr Glu Asp Glu Ala Lys Glu Leu Ala Ala
          145            150            155            160

Glu Val Glu Val Gln Asp Gly Pro Asn Glu Asp Gly Glu Met Phe Met
          165            170            175

Arg Pro Gly Lys Leu Phe Asp Tyr Phe Pro Lys Pro Tyr Pro Asn Ser
          180            185            190

Glu Ala Ala Arg Ala Ala Asn Asn Gly Ala Leu Pro Pro Asp Leu Ser
          195            200            205

Tyr Ile Val Arg Ala Arg His Gly Gly Glu Asp Tyr Val Phe Ser Leu
          210            215            220

Leu Thr Gly Tyr Cys Glu Pro Pro Thr Gly Val Ser Leu Arg Glu Gly

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1016

225                      230                      235                      240  
 Leu Tyr Phe Asn Pro Tyr Phe Pro Gly Gln Ala Ile Ala Met Ala Pro  
                                  245                      250                      255  
 Pro Ile Tyr Thr Asp Val Leu Glu Phe Asp Asp Gly Thr Pro Ala Thr  
                                  260                      265                      270  
 Met Ser Gln Ile Ala Lys Asp Val Cys Thr Phe Leu Arg Trp Ala Ser  
                                  275                      280                      285  
 Glu Pro Glu His Asp His Arg Lys Arg Met Gly Leu Lys Met Leu Met  
                                  290                      295                      300  
 Met Met Ala Leu Leu Val Pro Leu Val Tyr Thr Ile Lys Arg His Lys  
 305                                   310                      315                      320  
 Trp Ser Val Leu Lys Ser Arg Lys Leu Ala Tyr Arg Pro Pro Lys  
                                  325                      330                      335  
  
 <210> 1037  
 <211> 511  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 1037  
 His Gln Leu Gln Gly Pro Leu Pro Leu Arg Ala Leu Pro Trp His Ser  
   1                                   5                                   10                                   15  
 Ser Arg Ser Arg Val Thr Cys Thr Arg Cys Phe Ser Trp Met His Pro  
                                  20                                   25                                   30  
 Ser Pro Met His Pro Leu Arg Ala Gly Ser Lys Ser Gln Gly Ser Arg  
                                  35                                   40                                   45  
 Ser Pro Ala Pro Ser Pro Met Arg Ala Ala Asn Arg Ser His Ser Ala  
                                  50                                   55                                   60  
 Gly Arg Thr Pro Gly Arg Thr Pro Gly Lys Ser Ser Ser Lys Val Gln  
   65                                   70                                   75                                   80  
 Thr Thr Pro Ser Lys Pro Gly Gly Asp Arg Tyr Ile Pro His Arg Ser  
                                  85                                   90                                   95  
 Ala Ala Gln Met Glu Val Ala Ser Phe Leu Leu Ser Lys Glu Asn Gln  
                                  100                                   105                                   110  
 Pro Glu Asn Ser Gln Thr Pro Thr Lys Lys Glu His Gln Lys Ala Trp  
                                  115                                   120                                   125

1017

Ala Leu Asn Leu Asn Gly Phe Asp Val Glu Glu Ala Lys Ile Leu Arg  
 130 135 140

Leu Ser Gly Lys Pro Gln Asn Ala Pro Glu Gly Tyr Gln Asn Arg Leu  
 145 150 155 160

Lys Val Leu Tyr Ser Gln Lys Ala Thr Pro Gly Ser Ser Arg Lys Thr  
 165 170 175

Cys Arg Tyr Ile Pro Ser Leu Pro Asp Arg Ile Leu Asp Ala Pro Glu  
 180 185 190

Ile Arg Asn Asp Tyr Tyr Leu Asn Leu Val Asp Trp Ser Ser Gly Asn  
 195 200 205

Val Leu Ala Val Ala Leu Asp Asn Ser Val Tyr Leu Trp Ser Ala Ser  
 210 215 220

Ser Gly Asp Ile Leu Gln Leu Leu Gln Met Glu Gln Pro Gly Glu Tyr  
 225 230 235 240

Ile Ser Ser Val Ala Trp Ile Lys Glu Gly Asn Tyr Leu Ala Val Gly  
 245 250 255

Thr Ser Ser Ala Glu Val Gln Leu Trp Asp Val Gln Gln Gln Lys Arg  
 260 265 270

Leu Arg Asn Met Thr Ser His Ser Ala Arg Val Gly Ser Leu Ser Trp  
 275 280 285

Asn Ser Tyr Ile Leu Ser Ser Gly Ser Arg Ser Gly His Ile His His  
 290 295 300

His Asp Val Arg Val Ala Glu His His Val Ala Thr Leu Ser Gly His  
 305 310 315 320

Ser Gln Glu Val Cys Gly Leu Arg Trp Ala Pro Asp Gly Arg His Leu  
 325 330 335

Ala Ser Gly Gly Asn Asp Asn Leu Val Asn Val Trp Pro Ser Ala Pro  
 340 345 350

Gly Glu Gly Gly Trp Val Pro Leu Gln Thr Phe Thr Gln His Gln Gly  
 355 360 365

Ala Val Lys Ala Val Ala Trp Cys Pro Trp Gln Ser Asn Val Leu Ala  
 370 375 380

Thr Gly Gly Gly Thr Ser Asp Arg His Ile Arg Ile Trp Asn Val Cys  
 385 390 395 400

1018

Ser Gly Ala Cys Leu Ser Ala Val Asp Ala His Ser Gln Val Cys Ser  
 405 410 415  
 Ile Leu Trp Ser Pro His Tyr Lys Glu Leu Ile Ser Gly His Gly Phe  
 420 425 430  
 Ala Gln Asn Gln Leu Val Ile Trp Lys Tyr Pro Thr Met Ala Lys Val  
 435 440 445  
 Ala Glu Leu Lys Gly His Thr Ser Arg Val Leu Ser Leu Thr Met Ser  
 450 455 460  
 Pro Asp Gly Ala Thr Val Ala Ser Ala Ala Ala Asp Glu Thr Leu Arg  
 465 470 475 480  
 Leu Trp Arg Cys Phe Glu Leu Asp Pro Ala Arg Arg Arg Glu Arg Glu  
 485 490 495  
 Lys Ala Ser Ala Ala Lys Ser Ser Leu Ile His Gln Gly Ile Arg  
 500 505 510

&lt;210&gt; 1038

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1038

His Glu Pro Pro Ser Ala Ser Ser Val Ala Gly Asp Leu Gly Arg Gly  
 1 5 10 15  
 Thr Arg Thr Glu Val Glu Ala Arg Ala Ala Arg Pro Gly Ala Glu Ser  
 20 25 30  
 Ala Pro Ala Ala Ala Met Pro Asp Ser Trp Asp Lys Asp Val Tyr Pro  
 35 40 45  
 Glu Pro Pro Arg Arg Thr Pro Val Gln Pro Asn Pro Ile Val Tyr Met  
 50 55 60  
 Met Lys Ala Phe Asp Leu Ile Val Asp Arg Pro Val Thr Leu Val Arg  
 65 70 75 80  
 Glu Phe Ile Glu Arg Gln His Ala Lys Asn Arg Tyr Tyr Tyr Tyr His  
 85 90 95  
 Arg Gln Tyr Arg Arg Val Pro Asp Ile Thr Glu Cys Lys Glu Glu Asp  
 100 105 110

1019

Ile Met Cys Met Tyr Glu Ala Glu Met Gln Trp Lys Arg Asp Tyr Lys  
 115 120 125  
 Val Asp Gln Glu Ile Ile Asn Ile Met Gln Asp Arg Leu Lys Ala Cys  
 130 135 140  
 Gln Gln Arg Glu Gly Gln Asn Tyr Gln Gln Asn Cys Ile Lys Glu Val  
 145 150 155 160  
 Glu Gln Phe Thr Gln Val Ala Lys Ala Tyr Gln Asp Arg Tyr Gln Asp  
 165 170 175  
 Leu Gly Ala Tyr Ser Ser Ala Arg Lys Cys Leu Ala Lys Gln Arg Gln  
 180 185 190  
 Arg Met Leu Gln Glu Arg Lys Ala Ala Lys Glu Ala Ala Ala Ala Thr  
 195 200 205  
 Ser

&lt;210&gt; 1039

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (153)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1039

Leu Ala Ala Pro Asp Leu Ser Lys Pro Arg Gly Tyr His Trp Asp Thr  
 1 5 10 15  
 Ser Asp Trp Met Pro Ser Val Pro Leu Pro Asp Ile Gln Glu Phe Pro  
 20 25 30  
 Asn Tyr Glu Val Ile Asp Glu Gln Thr Pro Leu Tyr Ser Ala Asp Pro  
 35 40 45  
 Asn Ala Ile Asp Thr Asp Tyr Tyr Pro Gly Gly Tyr Asp Ile Glu Ser  
 50 55 60  
 Asp Phe Pro Pro Pro Pro Glu Asp Phe Pro Ala Ala Asp Glu Leu Pro  
 65 70 75 80  
 Pro Leu Pro Pro Glu Phe Ser Asn Gln Phe Glu Ser Ile His Pro Pro  
 85 90 95

1020

Arg Asp Met Pro Ala Ala Gly Ser Leu Gly Ser Ser Ser Arg Asn Arg  
 100 105 110  
 Gln Arg Phe Asn Leu Asn Gln Tyr Leu Pro Asn Phe Tyr Pro Leu Asp  
 115 120 125  
 Met Ser Glu Pro Gln Thr Lys Gly Thr Gly Glu Asn Ser Thr Cys Arg  
 130 135 140  
 Glu Pro His Ala Pro Tyr Pro Pro Xaa Tyr Gln Arg His Phe Glu Ala  
 145 150 155 160  
 Pro Ala Val Glu Ser Met Pro Met Ser Val Tyr Ala Ser Thr Ala Ser  
 165 170 175  
 Cys Ser Asp Val Ser Ala Cys Cys Glu Val Glu Ser Glu Val Met Met  
 180 185 190  
 Ser Asp Tyr Glu Ser Gly Asp Asp Gly His Phe Glu Glu Val Thr Ile  
 195 200 205  
 Pro Pro Leu Asp Ser Gln Gln His Thr Glu Val  
 210 215

<210> 1040  
 <211> 178  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (11)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1040  
 Phe Asp Leu Pro Tyr Arg Ala Glu Phe Gly Xaa Pro Gly Pro Pro Leu  
 1 5 10 15  
 Ser Ala Ala Cys Ser Trp Lys Phe Arg Leu Gly Cys Leu Leu Gly Ala  
 20 25 30  
 Met Glu Ser Asp Phe Tyr Leu Arg Tyr Tyr Val Gly His Lys Gly Lys  
 35 40 45  
 Phe Gly His Glu Phe Leu Glu Phe Glu Phe Arg Pro Asp Gly Lys Leu  
 50 55 60  
 Arg Tyr Ala Asn Asn Ser Asn Tyr Lys Asn Asp Val Met Ile Arg Lys

1021

65                      70                      75                      80  
 Glu Ala Tyr Val His Lys Ser Val Met Glu Glu Leu Lys Arg Ile Ile  
                                  85                      90                      95  
 Asp Asp Ser Glu Ile Thr Lys Glu Asp Asp Ala Leu Trp Pro Pro Pro  
                                  100                      105                      110  
 Asp Arg Val Gly Arg Gln Glu Leu Glu Ile Val Ile Gly Asp Glu His  
                                  115                      120                      125  
 Ile Ser Phe Thr Thr Ser Lys Ile Gly Ser Leu Ile Asp Val Asn Gln  
                                  130                      135                      140  
 Ser Lys Asp Pro Glu Gly Leu Arg Val Phe Tyr Tyr Leu Val Gln Asp  
 145                                   150                      155                      160  
 Leu Lys Cys Leu Val Phe Ser Leu Ile Gly Leu His Phe Lys Ile Lys  
                                  165                      170                      175  
 Pro Ile

<210> 1041  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1041  
 Leu Val Pro Asn Ser Ala Arg Ala Gly Ala Ser Tyr Ala Ala Ala Ala  
   1                                  5                                  10                                  15  
 Val Thr Met Ala His Tyr Lys Ala Ala Asp Ser Lys Arg Glu Gln Phe  
                                   20                                  25                                  30  
 Arg Arg Tyr Leu Glu Lys Ser Gly Val Leu Asp Thr Leu Thr Lys Val  
                                   35                                  40                                  45  
 Leu Val Ala Leu Tyr Glu Glu Pro Glu Lys Pro Asn Ser Ala Leu Asp  
                                   50                                  55                                  60  
 Phe Leu Lys His His Leu Gly Ala Ala Thr Pro Glu Asn Pro Glu Ile  
   65                                  70                                  75                                  80  
 Glu Leu Leu Arg Leu Glu Leu Ala Glu Met Lys Glu Lys Tyr Glu Ala  
                                   85                                  90                                  95  
 Ile Val Glu Glu Asn Lys Lys Leu Lys Ala Lys Leu Ala Gln Tyr Glu  
                                   100                                  105                                  110

1022

Pro Pro Gln Glu Glu Lys Arg Ala Glu  
 115 120

&lt;210&gt; 1042

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1042

Val Asp Pro Arg Val Arg Pro Arg Ser Val Asn Gly Glu Leu Gln Lys  
 1 5 10 15

Ala Ile Asp Leu Phe Thr Asp Ala Ile Lys Leu Asn Pro Arg Leu Ala  
 20 25 30

Ile Leu Tyr Ala Lys Arg Ala Ser Val Phe Val Lys Leu Gln Lys Pro  
 35 40 45

Asn Ala Ala Ile Arg Asp Cys Asp Arg Ala Ile Glu Ile Asn Pro Asp  
 50 55 60

Ser Ala Gln Pro Tyr Lys Trp Arg Gly Lys Ala His Arg Leu Leu Gly  
 65 70 75 80

His Trp Glu Glu Ala Ala His Asp Leu Ala Leu Ala Cys Lys Leu Asp  
 85 90 95

Tyr Asp Glu Asp Ala Ser Ala Met Leu Lys Glu Val Gln Pro Arg Ala  
 100 105 110

Gln Lys Ile Ala Glu His Arg Arg Lys Tyr Glu Arg Lys Arg Glu Glu  
 115 120 125

Arg Glu Ile Lys Glu Arg Ile Glu Arg Val Lys Lys Ala Arg Glu Glu  
 130 135 140

His Glu Arg Ala Gln Arg Glu Glu Glu Ala Arg Arg Gln Ser Gly Ala  
 145 150 155 160

Gln Tyr Gly Ser Phe Pro Gly Gly Phe Pro Gly Gly Met Pro Gly Asn  
 165 170 175

Phe Pro Gly Gly Met Pro Gly Met Gly Gly Gly Met Pro Gly Met Ala  
 180 185 190

Gly Met Pro Gly Leu Asn Glu Ile Leu Ser Asp Pro Glu Val Leu Ala  
 195 200 205



1023

Ala Met Gln Asp Pro Glu Val Met Val Ala Phe Gln Asp Val Ala Gln  
 210 215 220

Asn Pro Ala Asn Met Ser Lys Tyr Gln Ser Asn Pro Lys Val Met Asn  
 225 230 235 240

Leu Ile Ser Lys Leu Ser Ala Lys Phe Gly Gly Gln Ala  
 245 250

&lt;210&gt; 1043

&lt;211&gt; 343

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1043

Met Lys Thr Cys Gln Glu Glu Lys Leu Met Gly His Leu Gly Val Val  
 1 5 10 15

Leu Tyr Glu Tyr Leu Gly Glu Glu Tyr Pro Glu Val Leu Gly Ser Ile  
 20 25 30

Leu Gly Ala Leu Lys Ala Ile Val Asn Val Ile Gly Met His Lys Met  
 35 40 45

Thr Pro Pro Ile Lys Asp Leu Leu Pro Arg Leu Thr Pro Ile Leu Lys  
 50 55 60

Asn Arg His Glu Lys Val Gln Glu Asn Cys Ile Asp Leu Val Gly Arg  
 65 70 75 80

Ile Ala Asp Arg Gly Ala Glu Tyr Val Ser Ala Arg Glu Trp Met Arg  
 85 90 95

Ile Cys Phe Glu Leu Leu Glu Leu Leu Lys Ala His Lys Lys Ala Ile  
 100 105 110

Arg Arg Ala Thr Val Asn Thr Phe Gly Tyr Ile Ala Lys Ala Ile Gly  
 115 120 125

Pro His Asp Val Leu Ala Thr Leu Leu Asn Asn Leu Lys Val Gln Glu  
 130 135 140

Arg Gln Asn Arg Val Cys Thr Thr Val Ala Ile Ala Ile Val Ala Glu  
 145 150 155 160

Thr Cys Ser Pro Phe Thr Val Leu Pro Ala Leu Met Asn Glu Tyr Arg  
 165 170 175

Val Pro Glu Leu Asn Val Gln Asn Gly Val Leu Lys Ser Leu Ser Phe

1024

180	185	190
Leu Phe Glu Tyr Ile Gly Glu Met Gly Lys Asp Tyr Ile Tyr Ala Val		
195	200	205
Thr Pro Leu Leu Glu Asp Ala Leu Met Asp Arg Asp Leu Val His Arg		
210	215	220
Gln Thr Ala Ser Ala Val Val Gln His Met Ser Leu Gly Val Tyr Gly		
225	230	235
Phe Gly Cys Glu Asp Ser Leu Asn His Leu Leu Asn Tyr Val Trp Pro		
245	250	255
Asn Val Phe Glu Thr Ser Pro His Val Ile Gln Ala Val Met Gly Ala		
260	265	270
Leu Glu Gly Leu Arg Val Ala Ile Gly Pro Cys Arg Met Leu Gln Tyr		
275	280	285
Cys Leu Gln Gly Leu Phe His Pro Ala Arg Lys Val Arg Asp Val Tyr		
290	295	300
Trp Lys Ile Tyr Asn Ser Ile Tyr Ile Gly Ser Gln Asp Ala Leu Ile		
305	310	315
Ala His Tyr Pro Arg Ile Tyr Asn Asp Asp Lys Asn Thr Tyr Ile Arg		
325	330	335
Tyr Glu Leu Asp Tyr Ile Leu		
340		

&lt;210&gt; 1044

&lt;211&gt; 268

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1044

Leu Arg Arg Pro Tyr Ala Arg Tyr Asn Gly Leu Tyr Arg Ser Gly Ile
1 5 10 15

Arg Gly Arg Xaa Asn Leu Glu Ser Thr Arg Val Arg Glu Leu Pro Gly
20 25 30

1025

Gly Ala Met Ser Cys Ile Asn Leu Pro Thr Val Leu Pro Gly Ser Pro  
 35 40 45  
 Ser Lys Thr Arg Gly Gln Ile Gln Val Ile Leu Gly Pro Met Phe Ser  
 50 55 60  
 Gly Lys Ser Thr Glu Leu Met Arg Arg Val Arg Arg Phe Gln Ile Ala  
 65 70 75 80  
 Gln Tyr Lys Cys Leu Val Ile Lys Tyr Ala Lys Asp Thr Arg Tyr Ser  
 85 90 95  
 Ser Ser Phe Cys Thr His Asp Arg Asn Thr Met Glu Ala Leu Pro Ala  
 100 105 110  
 Cys Leu Leu Arg Asp Val Ala Gln Glu Ala Leu Gly Val Ala Val Ile  
 115 120 125  
 Gly Ile Asp Glu Gly Gln Phe Phe Pro Asp Ile Val Glu Phe Cys Glu  
 130 135 140  
 Ala Met Ala Asn Ala Gly Lys Thr Val Ile Val Ala Ala Leu Asp Gly  
 145 150 155 160  
 Thr Phe Gln Arg Lys Pro Phe Gly Ala Ile Leu Asn Leu Val Pro Leu  
 165 170 175  
 Ala Glu Ser Val Val Lys Leu Thr Ala Val Cys Met Glu Cys Phe Arg  
 180 185 190  
 Glu Ala Ala Tyr Thr Lys Arg Leu Gly Thr Glu Lys Glu Val Glu Val  
 195 200 205  
 Ile Gly Gly Ala Asp Lys Tyr His Ser Val Cys Arg Leu Cys Tyr Phe  
 210 215 220  
 Lys Lys Ala Ser Gly Gln Pro Ala Gly Pro Asp Asn Lys Glu Asn Cys  
 225 230 235 240  
 Pro Val Pro Gly Lys Pro Gly Glu Ala Val Ala Ala Arg Lys Leu Phe  
 245 250 255  
 Ala Pro Gln Gln Ile Leu Gln Cys Ser Pro Ala Asn  
 260 265

&lt;210&gt; 1045

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

1026

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (128)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1045

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Pro Gly Gln Ser Arg Trp Gln Gly Pro Pro Leu Pro Leu Cys Gln Ala
 1             5             10             15

Gly Ser Ala Lys Ser Gly Glu Pro Gly Ala Gly Gly Lys Ala Gly Asp
      20             25             30

Ser Pro Ala Leu Pro Pro Pro Pro Leu Gly Ala Gln Gln Leu Leu Arg
      35             40             45

Lys Val Trp His Pro Trp Arg Gly Gly Ala Pro Gly Trp Ala Gly Ser
 50             55             60

Arg Trp Pro Gly Ala Trp Arg Cys Ala Ala Gly Ala Cys Met Ala Pro
 65             70             75             80

Arg Gly Thr Gln Ala Glu Glu Ser Pro Phe Val Gly Asn Pro Gly Asn
      85             90             95

Ile Thr Gly Ala Arg Gly Leu Thr Gly Thr Leu Arg Cys Gln Leu Gln
      100            105            110

Val Gln Gly Glu Pro Pro Glu Val His Trp Leu Arg Asp Gly Gln Xaa
      115            120            125

Leu Glu Leu Ala Asp Ser Thr Gln Thr Gln Val
      130            135

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&lt;210&gt; 1046

&lt;211&gt; 416

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1046

```

Ser Pro Ser Glu Arg Leu Gln Arg Gly Arg Glu Glu Gln Pro Ala Gly
 1             5             10             15

Gly Gly Gly Glu Ser Val Ser Ser Trp Glu Glu Gln Asn Arg Gly Gly
      20             25             30

Ala Pro Ala Gly Ala Gly Gly Gly Pro Thr Met Ala Ile Arg Lys Lys
      35             40             45

```

1027

Ser Thr Lys Ser Pro Pro Val Leu Ser His Glu Phe Val Leu Gln Asn  
 50 55 60

His Ala Asp Ile Val Ser Cys Val Ala Met Val Phe Leu Leu Gly Leu  
 65 70 75 80

Met Phe Glu Ile Thr Ala Lys Ala Ser Ile Ile Phe Val Thr Leu Gln  
 85 90 95

Tyr Asn Val Thr Leu Pro Ala Thr Glu Glu Gln Ala Thr Glu Ser Val  
 100 105 110

Ser Leu Tyr Tyr Tyr Gly Ile Lys Asp Leu Ala Thr Val Phe Phe Tyr  
 115 120 125

Met Leu Val Ala Ile Ile Ile His Ala Val Ile Gln Glu Tyr Met Leu  
 130 135 140

Asp Lys Ile Asn Arg Arg Met His Phe Ser Lys Thr Lys His Ser Lys  
 145 150 155 160

Phe Asn Glu Ser Gly Gln Leu Ser Ala Phe Tyr Leu Phe Ala Cys Val  
 165 170 175

Trp Gly Thr Phe Ile Leu Ile Ser Glu Asn Tyr Ile Ser Asp Pro Thr  
 180 185 190

Ile Leu Trp Arg Ala Tyr Pro His Asn Leu Met Thr Phe Gln Met Lys  
 195 200 205

Phe Phe Tyr Ile Ser Gln Leu Ala Tyr Trp Leu His Ala Phe Pro Glu  
 210 215 220

Leu Tyr Phe Gln Lys Thr Lys Lys Glu Asp Ile Pro Arg Gln Leu Val  
 225 230 235 240

Tyr Ile Gly Leu Tyr Leu Phe His Ile Ala Gly Ala Tyr Leu Leu Asn  
 245 250 255

Leu Asn His Leu Gly Leu Val Leu Leu Val Leu His Tyr Phe Val Glu  
 260 265 270

Phe Leu Phe His Ile Ser Arg Leu Phe Tyr Phe Ser Asn Glu Lys Tyr  
 275 280 285

Gln Lys Gly Phe Ser Leu Trp Ala Val Leu Phe Val Leu Gly Arg Leu  
 290 295 300

Leu Thr Leu Ile Leu Ser Val Leu Thr Val Gly Phe Gly Leu Ala Arg  
 305 310 315 320

1028

Ala Glu Asn Gln Lys Leu Asp Phe Ser Thr Gly Asn Phe Asn Val Leu  
 325 330 335

Ala Val Arg Ile Ala Val Leu Ala Ser Ile Cys Val Thr Gln Ala Phe  
 340 345 350

Met Met Trp Lys Phe Ile Asn Phe Gln Leu Arg Arg Trp Arg Glu His  
 355 360 365

Ser Ala Phe Gln Ala Pro Ala Val Lys Lys Lys Pro Thr Val Thr Lys  
 370 375 380

Gly Arg Ser Ser Lys Lys Gly Thr Glu Asn Gly Val Asn Gly Thr Leu  
 385 390 395 400

Thr Ser Asn Val Ala Asp Ser Pro Arg Asn Lys Lys Glu Lys Ser Ser  
 405 410 415

<210> 1047

<211> 466

<212> PRT

<213> Homo sapiens

<400> 1047

Pro Ala Ser Ser Gly Leu Leu Pro Leu Ser Arg Ser Asn Leu Tyr Ser  
 1 5 10 15

Gly Arg Thr Gly Ile Pro Arg Ala Pro Pro Ala Leu Ala Ala Leu Ala  
 20 25 30

Thr Ala Pro Gly Arg Arg Ala Pro Val His Thr Gly Ser Leu Leu Gly  
 35 40 45

Thr Asn Ser Ser Thr Met Gly Leu Ala Trp Gly Leu Gly Val Leu Phe  
 50 55 60

Leu Met His Val Cys Gly Thr Asn Arg Ile Pro Glu Ser Gly Gly Asp  
 65 70 75 80

Asn Ser Val Phe Asp Ile Phe Glu Leu Thr Gly Ala Ala Arg Lys Gly  
 85 90 95

Ser Gly Arg Arg Leu Val Lys Gly Pro Asp Pro Ser Ser Pro Ala Phe  
 100 105 110

Arg Ile Glu Asp Ala Asn Leu Ile Pro Pro Val Pro Asp Asp Lys Phe

1029

115	120	125
Gln Asp Leu Val Asp Ala Val Arg Ala Glu Lys Gly Phe Leu Leu Leu		
130	135	140
Ala Ser Leu Arg Gln Met Lys Lys Thr Arg Gly Thr Leu Leu Ala Leu		
145	150	155 160
Glu Arg Lys Asp His Ser Gly Gln Val Phe Ser Val Val Ser Asn Gly		
	165	170 175
Lys Ala Gly Thr Leu Asp Leu Ser Leu Thr Val Gln Gly Lys Gln His		
	180	185 190
Val Val Ser Val Glu Glu Ala Leu Leu Ala Thr Gly Gln Trp Lys Ser		
	195	200 205
Ile Thr Leu Phe Val Gln Glu Asp Arg Ala Gln Leu Tyr Ile Asp Cys		
	210	215 220
Glu Lys Met Glu Asn Ala Glu Leu Asp Val Pro Ile Gln Ser Val Phe		
	225	230 235 240
Thr Arg Asp Leu Ala Ser Ile Ala Arg Leu Arg Ile Ala Lys Gly Gly		
	245	250 255
Val Asn Asp Asn Phe Gln Gly Val Leu Gln Asn Val Arg Phe Val Phe		
	260	265 270
Gly Thr Thr Pro Glu Asp Ile Leu Arg Asn Lys Gly Cys Ser Ser Ser		
	275	280 285
Thr Ser Val Leu Leu Thr Leu Asp Asn Asn Val Val Asn Gly Ser Ser		
	290	295 300
Pro Ala Ile Arg Thr Asn Tyr Ile Gly His Lys Thr Lys Asp Leu Gln		
	305	310 315 320
Ala Ile Cys Gly Ile Ser Cys Asp Glu Leu Ser Ser Met Val Leu Glu		
	325	330 335
Leu Arg Gly Leu Arg Thr Ile Val Thr Thr Leu Gln Asp Ser Ile Arg		
	340	345 350
Lys Val Thr Glu Glu Asn Lys Glu Leu Ala Asn Glu Leu Arg Arg Pro		
	355	360 365
Pro Leu Cys Tyr His Asn Gly Val Gln Tyr Arg Asn Asn Glu Glu Trp		
	370	375 380
Thr Val Asp Ser Cys Thr Glu Cys His Cys Gln Asn Ser Val Thr Ile		

[illegible]

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<210> 1048
<211> 217
<212> PRT
<213> Homo sapiens

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<220>
<221> SITE
<222> (122)
<223> xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

```

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<220>
<221> SITE
<222> (200)
<223> Xaa equals any of the naturally occurring L-amino acids

```

<400> 1048  
Asp Pro Arg Val Arg Gln Ser His Ile Ser Asp Thr Ser Val Val Val  
1 5 10 15

Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp Cys Ile Ile Ala Glu  
20 25 30

Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg Ser Arg Ala Glu Ala  
35 40 45

Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met Lys Ala Thr Val Ile  
50 55 60



1031

Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu Glu Ile Asn Glu Leu  
65 70 75 80

Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val Glu Asn Ala Lys Cys  
85 90 95

Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln Ser Glu Gln Gln Gly  
100 105 110

Glu Ala Ala Leu Ser Asp Ala Arg Cys Xaa Leu Ala Glu Leu Glu Gly  
115 120 125

Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys Leu Ile Arg Glu Tyr  
130 135 140

Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp Ile Glu Ile Ala Thr  
145 150 155 160

Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg Leu Cys Glu Gly Ile  
165 170 175

Gly Ala Val Asn Val Cys Val Ser Ser Xaa Arg Gly Gly Val Val Cys  
180 185 190

Gly Asp Leu Cys Val Ser Gly Xaa Arg Pro Val Thr Ala Val Ser Ala  
195 200 205

Ala Leu Arg Ala Thr Gly Thr Trp Arg  
210 215

<210> 1049

<211> 406

<212> PRT

<213> Homo sapiens

<400> 1049

Gly Ser Ala Ala Ala Arg Tyr Leu Ser Ala Thr Trp Arg Asn Trp Ile  
1 5 10 15

Ser Leu Pro Pro Ala Gly Leu Pro Ala Thr Ala Gly Leu Arg His Ser  
20 25 30

Gly Ser Leu Met Ala Ala Thr Cys Glu Ile Ser Asn Ile Phe Ser Asn  
35 40 45

Tyr Phe Ser Ala Met Tyr Ser Ser Glu Asp Ser Thr Leu Ala Ser Val  
50 55 60

1032

Pro Pro Ala Ala Thr Phe Gly Ala Asp Asp Leu Val Leu Thr Leu Ser  
 65 70 75 80

Asn Pro Gln Met Ser Leu Glu Gly Thr Glu Lys Ala Ser Trp Leu Gly  
 85 90 95

Glu Gln Pro Gln Phe Trp Ser Lys Thr Gln Val Leu Asp Trp Ile Ser  
 100 105 110

Tyr Gln Val Glu Lys Asn Lys Tyr Asp Ala Ser Ala Ile Asp Phe Ser  
 115 120 125

Arg Cys Asp Met Asp Gly Ala Thr Leu Cys Asn Cys Ala Leu Glu Glu  
 130 135 140

Leu Arg Leu Val Phe Gly Pro Leu Gly Asp Gln Leu His Ala Gln Leu  
 145 150 155 160

Arg Asp Leu Thr Ser Ser Ser Ser Asp Glu Leu Ser Trp Ile Ile Glu  
 165 170 175

Leu Leu Glu Lys Asp Gly Met Ala Phe Gln Glu Ala Leu Asp Pro Gly  
 180 185 190

Pro Phe Asp Gln Gly Ser Pro Phe Ala Gln Glu Leu Leu Asp Asp Gly  
 195 200 205

Gln Gln Ala Ser Pro Tyr His Pro Gly Ser Cys Gly Ala Gly Ala Pro  
 210 215 220

Ser Pro Gly Ser Ser Asp Val Ser Thr Ala Gly Thr Gly Ala Ser Arg  
 225 230 235 240

Ser Ser His Ser Ser Asp Ser Gly Gly Ser Asp Val Asp Leu Asp Pro  
 245 250 255

Thr Asp Gly Lys Leu Phe Pro Ser Asp Gly Phe Arg Asp Cys Lys Lys  
 260 265 270

Gly Asp Pro Lys His Gly Lys Arg Lys Arg Gly Arg Pro Arg Lys Leu  
 275 280 285

Ser Lys Glu Tyr Trp Asp Cys Leu Glu Gly Lys Lys Ser Lys His Ala  
 290 295 300

Pro Arg Gly Thr His Leu Trp Glu Phe Ile Arg Asp Ile Leu Ile His  
 305 310 315 320

Pro Glu Leu Asn Glu Gly Leu Met Lys Trp Glu Asn Arg His Glu Gly  
 325 330 335

1033

Val Phe Lys Phe Leu Arg Ser Glu Ala Val Ala Gln Leu Trp Gly Gln  
                   340                                  345                                  350

Lys Lys Lys Asn Ser Asn Met Thr Tyr Glu Lys Leu Ser Arg Ala Met  
                   355                                  360                                  365

Arg Tyr Tyr Tyr Lys Arg Glu Ile Leu Glu Arg Val Asp Gly Arg Arg  
                   370                                  375                                  380

Leu Val Tyr Lys Phe Gly Lys Asn Ser Ser Gly Trp Lys Glu Glu Glu  
                   385                                  390                                  395                                  400

Val Leu Gln Ser Arg Asn  
                                   405

&lt;210&gt; 1050

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (53)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (86)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1050

Arg Pro Ala Leu Asp Thr Cys Cys Pro Phe Pro Ala Arg Ile Leu Gly  
   1                                  5                                  10                                  15

Ser Phe Pro Leu Ser Gln His Leu Gly Pro Ala Phe Asp Thr Thr Pro  
                   20                                  25                                  30

Arg Leu Pro Thr Leu Arg Ala Trp Ser Leu Pro Gln Gly Pro Leu Ser  
                   35                                  40                                  45

Trp Ala Met Ala Xaa Lys Gly Val Leu Gly Pro Gly Gln Leu Gly Ala  
                   50                                  55                                  60

Val Ala Ile Leu Leu Tyr Leu Gly Leu Leu Arg Ser Gly Thr Gly Ala  
   65                                  70                                  75                                  80

Glu Gly Ala Glu Ala Xaa Cys Gly Val Ala Pro Gln Ala Arg Ile Thr  
                                   85                                  90                                  95

1034

Gly Gly Ser Ser Ala Val Ala Gly Gln Trp Pro Trp Gln Val Ser Ile  
 100 105 110

Thr Tyr Glu Gly Val His Val Cys Gly Gly Ser Leu Val Ser Glu Gln  
 115 120 125

Trp Val Leu Ser Ala Ala His Cys Phe Pro Ser Glu His His Lys Glu  
 130 135 140

Ala Tyr Glu Val Lys Leu Gly Ala His Gln Leu Asp Ser Tyr Ser Glu  
 145 150 155 160

Asp Ala Lys Val Ser Thr Leu Lys Asp Ile Ile Pro His Pro Ser Tyr  
 165 170 175

Leu Gln Glu Gly Ser Gln Gly Asp Ile Ala Leu Leu Gln Leu Ser Arg  
 180 185 190

Pro Ile Thr Phe Ser Arg Tyr Ile Arg Pro Ile Cys Leu Pro Ala Ala  
 195 200 205

Asn Ala Ser Phe Pro Asn Gly Leu His Cys Thr Val Thr Gly Trp Gly  
 210 215 220

His Val Ala Pro Ser Val Ser Leu Leu Thr Pro Lys Pro Leu Gln Gln  
 225 230 235 240

Leu Glu Val Pro Leu Ile Ser Arg Glu Thr Trp  
 245 250

<210> 1051

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1051

His Tyr Arg Arg Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Arg Gly Arg  
 1 5 10 15

Val Asp Ile Arg Arg Arg Ser Ser Arg Arg Pro Arg Glu Pro Pro Gly  
 20 25 30

Pro Ser Arg Arg Arg Arg Arg Arg Pro Asp Pro Arg Thr Met Pro  
 35 40 45

Ser Glu Lys Thr Phe Lys Gln Arg Arg Thr Phe Glu Gln Arg Val Glu  
 50 55 60

Asp Val Arg Leu Ile Arg Glu Gln His Pro Thr Lys Ile Pro Val Ile

65				70				75				80			
Ile	Glu	Arg	Tyr	Lys	Gly	Glu	Lys	Gln	Leu	Pro	Val	Leu	Asp	Lys	Thr
				85					90					95	
Lys	Phe	Leu	Val	Pro	Asp	His	Val	Asn	Met	Ser	Glu	Leu	Ile	Lys	Ile
			100					105					110		
Ile	Arg	Arg	Arg	Leu	Gln	Leu	Asn	Ala	Asn	Gln	Ala	Phe	Phe	Leu	Leu
			115				120					125			
Val	Asn	Gly	His	Ser	Met	Val	Ser	Val	Ser	Thr	Pro	Ile	Ser	Glu	Val
	130					135					140				
Tyr	Glu	Ser	Glu	Lys	Asp	Glu	Asp	Gly	Phe	Leu	Tyr	Met	Val	Tyr	Ala
145					150					155					160
Ser	Gln	Glu	Thr	Phe	Gly	Met	Lys	Leu	Ser	Val					
				165					170						

<211> 189

<212> PRT:

<213> Homo

<400> 1052.

BNSDOCID: &lt;WO\_\_0055350A1\_I\_&gt;

1036

Asp Ala Ala Leu Arg Ala Cys Arg Arg Leu Asn Asp Phe Ala Ser Thr  
 130 135 140

Val Arg Ile Leu Glu Val Val Lys Asp Lys Ala Gly Pro His Lys Glu  
 145 150 155 160

Ile Tyr Pro Tyr Val Ile Gln Glu Leu Arg Pro Thr Leu Asn Glu Leu  
 165 170 175

Gly Ile Ser Thr Pro Glu Glu Leu Gly Leu Asp Lys Val  
 180 185

&lt;210&gt; 1053

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1053

Arg His Ser Ala Ser Pro Arg Cys Arg Leu Pro Pro Thr Glu Pro Val  
 1 5 10 15

Ser Gly Leu Arg Ala Ser Gly Glu Met Leu Leu Pro Leu Leu Leu Leu  
 20 25 30

Leu Pro Met Cys Trp Ala Val Glu Val Lys Arg Pro Arg Gly Val Ser  
 35 40 45

Leu Thr Asn His His Phe Tyr Asp Glu Ser Lys Pro Phe Thr Cys Leu  
 50 55 60

Asp Gly Ser Ala Thr Ile Pro Phe Asp Gln Val Asn Asp Asp Tyr Cys  
 65 70 75 80

Asp Cys Lys Asp Gly Ser Asp Glu Pro Gly Thr Ala Ala Cys Pro Asn  
 85 90 95

Gly Ser Phe His Cys Thr Asn Thr Gly Tyr Lys Pro Leu Tyr Ile Pro  
 100 105 110

Ser Asn Arg Val Asn Asp Gly Val Cys Asp Cys Cys Asp Gly Thr Asp  
 115 120 125

Glu Tyr Asn Ser Gly Val Ile Cys Glu Asn Thr Cys Lys Glu Lys Gly  
 130 135 140

Arg Lys Glu Arg Glu Ser Leu Gln Gln Met Ala Glu Val Thr Arg Glu  
 145 150 155 160

1037

Gly Phe Arg Leu Lys Lys Ile Leu Ile Glu Asp Trp Lys Lys Ala Arg  
 165 170 175  
 Glu Glu Lys Gln Lys Lys Leu Ile Glu Leu Gln Ala Gly Lys Lys Ser  
 180 185 190  
 Leu Glu Asp Gln Val Glu Met Leu Arg Thr Val Lys Glu Glu Ala Glu  
 195 200 205  
 Lys Pro Glu Arg Glu Ala Lys Glu Gln His Gln Lys Leu Trp Glu Glu  
 210 215 220  
 Gln Leu Ala Ala Ala Lys Ala Gln Gln Glu Gln Glu Leu Ala Ala Asp  
 225 230 235 240  
 Ala Phe Lys Glu Leu Asp Asp Asp Met Asp Gly Thr Val Ser Val Thr  
 245 250 255  
 Glu Leu Gln Thr His Pro Glu Leu Asp Thr Asp Gly Asp Gly Ala Leu  
 260 265 270  
 Ser Glu Ala Glu Ala Gln Ala Leu Leu Ser Gly Asp Thr Gln Thr Asp  
 275 280 285  
 Ala Thr Ser Phe Tyr Asp Arg Val Trp Gly Pro Gly Gly Ala Gly Pro  
 290 295 300  
 His Ser Gln Ala Pro Thr Ala Phe Lys Asp Gly  
 305 310 315

<210> 1054  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

<400> 1054

Val Trp Lys Val Ile Val Trp Ser His Ser Ser Leu Ile Thr Leu Leu  
 1 5 10 15  
 Gly Ile Leu Glu Glu Lys Gly Ser Lys Thr Tyr Thr His Thr Pro Thr  
 20 25 30  
 Gln Ser Asn Ser Val Phe Lys Gln Ile Pro Arg Ile Leu Gly Pro Gly  
 35 40 45  
 Leu Asn Lys Ala Gly Lys Phe Pro Ser Leu Leu Thr His Asn Glu Asn  
 50 55 60  
 Met Val Ala Lys Val Asp Glu Val Lys Ser Thr Ile Lys Phe Gln Met

1038

65                                      70                                      75                                      80  
 Lys Lys Val Leu Cys Leu Ala Val Ala Val Gly His Val Lys Met Thr  
    85                                      90                                      95  
 Asp Asp Glu Leu Val Tyr Asn Ile His Leu Ala Val Asn Phe Leu Val  
    100                                      105                                      110  
 Ser Leu Leu Lys Lys Asn Trp Gln Asn Val Arg Ala Leu Tyr Ile Lys  
    115                                      120                                      125  
 Ser Thr Met Gly Lys Pro Gln Arg Leu Tyr  
    130                                      135

&lt;210&gt; 1055

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1055

Gly Thr Arg Glu Glu Ala Gly Val Asp Leu Val Ser Pro Thr Pro Leu  
   1   5   10   15  
 Thr Pro Pro Asp Pro Gly Ala Ala Ser Ala Thr Ala Thr Ala Pro Ala  
    20   25   30  
 Pro Ala Ala Ala Arg Arg Gly Glu Ala Met Ala Lys Val Ser Val Leu  
    35   40   45  
 Asn Val Ala Val Leu Glu Asn Pro Ser Pro Phe His Ser Pro Phe Arg  
    50   55   60  
 Phe Glu Ile Ser Phe Glu Cys Ser Glu Ala Leu Ala Asp Asp Leu Glu  
   65   70   75   80  
 Trp Lys Ile Ile Tyr Val Gly Ser Ala Glu Ser Glu Glu Phe Asp Gln  
    85   90   95  
 Ile Leu Asp Ser Val Leu Val Gly Pro Val Pro Ala Gly Arg His Met  
    100   105   110  
 Phe Val Phe Gln Ala Asp Ala Pro Asn Pro Ser Leu Ile Pro Glu Thr  
    115   120   125  
 Asp Ala Val Gly Val Thr Val Val Leu Ile Thr Cys Thr Tyr His Gly  
    130   135   140  
 Gln Glu Phe Ile Arg Val Gly Tyr Tyr Val Asn Asn Glu Tyr Leu Asn  
   145   150   155   160



1039

Pro Glu Leu Arg Glu Asn Pro Pro Met Lys Pro Asp Phe Ser Gln Leu  
165 170 175

Gln Arg Asn Ile Leu Ala Ser Asn Pro Arg Val Thr Arg Phe His Ile  
180 185 190

Asn Trp Asp Asn Asn Met Asp Arg Leu Glu Ala Ile Glu Thr Gln Asp  
195 200 205

Pro Ser Leu Gly Cys Gly Leu Pro Leu Asn Cys Thr Pro Ile Lys Gly  
210 215 220

Leu Gly Leu Pro Gly Cys Ile Pro Gly Leu Leu Pro Glu Asn Ser Met  
225 230 235 240

Asp Cys Ile

<210> 1056

<211> 211

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1056

His Glu Pro Arg Arg Leu Leu Xaa Asp Ala Glu Gly Pro Glu Glu Thr  
1 5 10 15

Val Arg Leu Trp Pro Ala Ala Arg Ala Ala Met Asp Ala Ala Glu Val  
20 25 30

Glu Phe Leu Ala Glu Lys Glu Leu Val Thr Ile Ile Pro Asn Phe Ser  
35 40 45

Leu Asp Lys Ile Tyr Leu Ile Gly Gly Asp Leu Gly Pro Phe Asn Pro  
50 55 60

Gly Leu Pro Val Glu Val Pro Leu Trp Leu Ala Ile Asn Leu Lys Gln  
65 70 75 80

Arg Gln Lys Cys Arg Leu Leu Pro Pro Glu Trp Met Asp Val Glu Lys  
85 90 95

Leu Glu Lys Met Arg Asp His Glu Arg Lys Glu Glu Thr Phe Thr Pro

1040

100	105	110
Met Pro Ser Pro Tyr Tyr Met Glu Leu Thr Lys Leu Leu Leu Asn His		
115	120	125
Ala Ser Asp Asn Ile Pro Lys Ala Asp Glu Ile Arg Thr Leu Val Lys		
130	135	140
Asp Met Trp Asp Thr Arg Ile Ala Lys Leu Arg Val Ser Ala Asp Ser		
145	150	155 160
Phe Val Arg Gln Gln Glu Ala His Ala Lys Leu Asp Asn Leu Thr Leu		
165	170	175
Met Glu Ile Asn Thr Ser Gly Thr Phe Leu Thr Gln Ala Leu Asn His		
180	185	190
Met Tyr Lys Leu Arg Thr Asn Leu Gln Pro Leu Glu Ser Thr Gln Ser		
195	200	205
Gln Asp Phe		
210		

&lt;210&gt; 1057

&lt;211&gt; 407

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (343)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1057

Val Ile Leu Gly Ala Gly Leu Arg Asp Lys Asp Met Trp Ile Pro Val		
1	5	10 15
Val Gly Leu Pro Arg Arg Leu Arg Leu Ser Ala Leu Ala Gly Ala Gly		
20	25	30
Arg Phe Cys Ile Leu Gly Ser Glu Ala Ala Thr Arg Lys His Leu Pro		
35	40	45
Ala Arg Asn His Cys Gly Leu Ser Asp Ser Ser Pro Gln Leu Trp Pro		
50	55	60
Glu Pro Asp Phe Arg Asn Pro Pro Arg Lys Ala Ser Lys Ala Ser Leu		
65	70	75 80

1041

Asp Phe Lys Arg Tyr Val Thr Asp Arg Arg Leu Ala Glu Thr Leu Ala  
 85 90 95  
 Gln Ile Tyr Leu Gly Lys Pro Ser Arg Pro Pro His Leu Leu Leu Glu  
 100 105 110  
 Cys Asn Pro Gly Pro Gly Ile Leu Thr Gln Ala Leu Leu Glu Ala Gly  
 115 120 125  
 Ala Lys Val Val Ala Leu Glu Ser Asp Lys Thr Phe Ile Pro His Leu  
 130 135 140  
 Glu Ser Leu Gly Lys Asn Leu Asp Gly Lys Leu Arg Val Ile His Cys  
 145 150 155 160  
 Asp Phe Phe Lys Leu Asp Pro Arg Ser Gly Gly Val Ile Lys Pro Pro  
 165 170 175  
 Ala Met Ser Ser Arg Gly Leu Phe Lys Asn Leu Gly Ile Glu Ala Val  
 180 185 190  
 Pro Trp Thr Ala Asp Ile Pro Leu Lys Val Val Gly Met Phe Pro Ser  
 195 200 205  
 Arg Gly Glu Lys Arg Ala Leu Trp Lys Leu Ala Tyr Asp Leu Tyr Ser  
 210 215 220  
 Cys Thr Ser Ile Tyr Lys Phe Gly Arg Ile Glu Val Asn Met Phe Ile  
 225 230 235 240  
 Gly Glu Lys Glu Phe Gln Lys Leu Met Ala Asp Pro Gly Asn Pro Asp  
 245 250 255  
 Leu Tyr His Val Leu Ser Val Ile Trp Gln Leu Ala Cys Glu Ile Lys  
 260 265 270  
 Val Leu His Met Glu Pro Trp Ser Ser Phe Asp Ile Tyr Thr Arg Lys  
 275 280 285  
 Gly Pro Leu Glu Asn Pro Lys Arg Arg Glu Leu Leu Asp Gln Leu Gln  
 290 295 300  
 Gln Lys Leu Tyr Leu Ile Gln Met Ile Pro Arg Gln Asn Leu Phe Thr  
 305 310 315 320  
 Lys Asn Leu Thr Pro Met Asn Tyr Asn Ile Phe Phe His Leu Leu Lys  
 325 330 335  
 His Cys Phe Gly Arg Arg Xaa Ala Thr Val Ile Asp His Leu Arg Ser  
 340 345 350

1042

Leu Thr Pro Leu Asp Ala Arg Asp Ile Leu Met Gln Ile Gly Lys Gln  
355 360 365

Glu Asp Glu Lys Val Val Asn Met His Pro Gln Asp Phe Lys Thr Leu  
370 375 380

Phe Glu Thr Ile Glu Arg Ser Lys Asp Cys Ala Tyr Lys Trp Leu Tyr  
385 390 395 400

Asp Glu Thr Leu Glu Asp Arg  
405

&lt;210&gt; 1058

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1058

Ser Ser Trp Val Gly Gly Ser Leu Arg Gln Ala Ala Thr Leu Glu Gly  
1 5 10 15

Glu Gln Gly Ser Ala Val Ser Ala Ala Ser His Ala Arg Ser Asp Leu  
20 25 30

Ser Leu Gly Thr Pro Gln Glu Pro Glu Asp Ser Ser Gly Gln Cys Arg  
35 40 45

Trp Gly Val Gly Gly Glu Ser Gly Arg Glu Ala Leu Arg Ala Pro Ser  
50 55 60

Pro Thr Thr Asn Leu Ala Leu Val Val Ile Phe Arg Gln Asn Phe Val  
65 70 75 80

Val Phe Phe Pro Phe Tyr Asp Gly Phe  
85

&lt;210&gt; 1059

&lt;211&gt; 457

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1059

Gly Thr Arg Pro Ser Ser Cys Ser Gln Thr Glu Ala Gln Pro Pro Ser  
1 5 10 15

Pro Val Ser Ile Thr Ser Ala Ala Ser Met Ser Asp Lys Leu Pro Tyr  
20 25 30

1043

Lys Val Ala Asp Ile Gly Leu Ala Ala Trp Gly Arg Lys Ala Leu Asp  
 35 40 45  
 Ile Ala Glu Asn Glu Met Pro Gly Leu Met Arg Met Arg Glu Arg Tyr  
 50 55 60  
 Ser Ala Ser Lys Pro Leu Lys Gly Ala Arg Ile Ala Gly Cys Leu His  
 65 70 75 80  
 Met Thr Val Glu Thr Ala Val Leu Ile Glu Thr Leu Val Thr Leu Gly  
 85 90 95  
 Ala Glu Val Gln Trp Ser Ser Cys Asn Ile Phe Ser Thr Gln Asp His  
 100 105 110  
 Ala Ala Ala Ala Ile Ala Lys Ala Gly Ile Pro Val Tyr Ala Trp Lys  
 115 120 125  
 Gly Glu Thr Asp Glu Glu Tyr Leu Trp Cys Ile Glu Gln Thr Leu Tyr  
 130 135 140  
 Phe Lys Asp Gly Pro Leu Asn Met Ile Leu Asp Asp Gly Gly Asp Leu  
 145 150 155 160  
 Thr Asn Leu Ile His Thr Lys Tyr Pro Gln Leu Leu Pro Gly Ile Arg  
 165 170 175  
 Gly Ile Ser Glu Thr Thr Thr Gly Val His Asn Leu Tyr Lys Met  
 180 185 190  
 Met Ala Asn Gly Ile Leu Lys Val Pro Ala Ile Asn Val Asn Asp Ser  
 195 200 205  
 Val Thr Lys Ser Lys Phe Asp Asn Leu Tyr Gly Cys Arg Glu Ser Leu  
 210 215 220  
 Ile Asp Gly Ile Lys Arg Ala Thr Asp Val Met Ile Ala Gly Lys Val  
 225 230 235 240  
 Ala Val Val Ala Gly Tyr Gly Asp Val Gly Lys Gly Cys Ala Gln Ala  
 245 250 255  
 Leu Arg Gly Phe Gly Ala Arg Val Ile Ile Thr Glu Ile Asp Pro Ile  
 260 265 270  
 Asn Ala Leu Gln Ala Ala Met Glu Gly Tyr Glu Val Thr Thr Met Asp  
 275 280 285  
 Glu Ala Cys Gln Glu Gly Asn Ile Phe Val Thr Thr Thr Gly Cys Ile  
 290 295 300

1044

Asp Ile Ile Leu Gly Arg His Phe Glu Gln Met Lys Asp Asp Ala Ile  
305 310 315 320

Val Cys Asn Ile Gly His Phe Asp Val Glu Ile Asp Val Lys Trp Leu  
325 330 335

Asn Glu Asn Ala Val Glu Lys Val Asn Ile Lys Pro Gln Val Asp Arg  
340 345 350

Tyr Arg Leu Lys Asn Gly Arg Arg Ile Ile Leu Leu Ala Glu Gly Arg  
355 360 365

Leu Val Asn Leu Gly Cys Ala Met Gly His Pro Ser Phe Val Met Ser  
370 375 380

Asn Ser Phe Thr Asn Gln Val Met Ala Gln Ile Glu Leu Trp Thr His  
385 390 395 400

Pro Asp Lys Tyr Pro Val Gly Val His Phe Leu Pro Lys Lys Leu Asp  
405 410 415

Glu Ala Val Ala Glu Ala His Leu Gly Lys Leu Asn Val Lys Leu Thr  
420 425 430

Lys Leu Thr Glu Lys Gln Ala Gln Tyr Leu Gly Met Ser Cys Asp Gly  
435 440 445

Pro Phe Lys Pro Asp His Tyr Arg Tyr  
450 455

<210> 1060

<211> 511

<212> PRT

<213> Homo sapiens

<400> 1060

Glu Gly Val Met Ala Asp Gly Gln Val Ala Glu Leu Leu Arg Arg  
1 5 10 15

Leu Glu Ala Ser Asp Gly Gly Leu Asp Ser Ala Glu Leu Ala Glu  
20 25 30

Leu Gly Met Glu His Gln Ala Val Val Gly Ala Val Lys Ser Leu Gln  
35 40 45

Ala Leu Gly Glu Val Ile Glu Ala Glu Leu Arg Ser Thr Lys His Trp  
50 55 60

1045

Glu Leu Thr Ala Glu Gly Glu Glu Ile Ala Arg Glu Gly Ser His Glu  
 65 70 75 80

Ala Arg Val Phe Arg Ser Ile Pro Pro Glu Gly Leu Ala Gln Ser Glu  
 85 90 95

Leu Met Arg Leu Pro Ser Gly Lys Val Gly Phe Ser Lys Ala Met Ser  
 100 105 110

Asn Lys Trp Ile Arg Val Asp Lys Ser Ala Ala Asp Gly Pro Arg Val  
 115 120 125

Phe Arg Val Val Asp Ser Met Glu Asp Glu Val Gln Arg Arg Leu Gln  
 130 135 140

Leu Val Arg Gly Gly Gln Ala Glu Lys Leu Gly Glu Lys Glu Arg Ser  
 145 150 155 160

Glu Leu Arg Lys Arg Lys Leu Leu Ala Glu Val Thr Leu Lys Thr Tyr  
 165 170 175

Trp Val Ser Lys Gly Ser Ala Phe Ser Thr Ser Ile Ser Lys Gln Glu  
 180 185 190

Thr Glu Leu Ser Pro Glu Met Ile Ser Ser Gly Ser Trp Arg Asp Arg  
 195 200 205

Pro Phe Lys Pro Tyr Asn Phe Leu Ala His Gly Val Leu Pro Asp Ser  
 210 215 220

Gly His Leu His Pro Leu Leu Lys Val Arg Ser Gln Phe Arg Gln Ile  
 225 230 235 240

Phe Leu Glu Met Gly Phe Thr Glu Met Pro Thr Asp Asn Phe Ile Glu  
 245 250 255

Ser Ser Phe Trp Asn Phe Asp Ala Leu Phe Gln Pro Gln Gln His Pro  
 260 265 270

Ala Arg Asp Gln His Asp Thr Phe Phe Leu Arg Asp Pro Ala Glu Ala  
 275 280 285

Leu Gln Leu Pro Met Asp Tyr Val Gln Arg Val Lys Arg Thr His Ser  
 290 295 300

Gln Gly Gly Tyr Gly Ser Gln Gly Tyr Lys Tyr Asn Trp Lys Leu Asp  
 305 310 315 320

Glu Ala Arg Lys Asn Leu Leu Arg Thr His Thr Thr Ser Ala Ser Ala  
 325 330 335

1046

Arg Ala Leu Tyr Arg Leu Ala Gln Lys Lys Pro Phe Thr Pro Val Lys  
 340 345 350  
 Tyr Phe Ser Ile Asp Arg Val Phe Arg Asn Glu Thr Leu Asp Ala Thr  
 355 360 365  
 His Leu Ala Glu Phe His Gln Ile Glu Gly Val Val Ala Asp His Gly  
 370 375 380  
 Leu Thr Leu Gly His Leu Met Gly Val Leu Arg Glu Phe Phe Thr Lys  
 385 390 395 400  
 Leu Gly Ile Thr Gln Leu Arg Phe Lys Pro Ala Tyr Asn Pro Tyr Thr  
 405 410 415  
 Glu Pro Ser Met Glu Val Phe Ser Tyr His Gln Gly Leu Lys Lys Trp  
 420 425 430  
 Val Glu Val Gly Asn Ser Gly Val Phe Arg Pro Glu Met Leu Leu Pro  
 435 440 445  
 Met Gly Leu Pro Glu Asn Val Ser Val Ile Ala Trp Gly Leu Ser Leu  
 450 455 460  
 Glu Arg Pro Thr Met Ile Lys Tyr Gly Ile Asn Asn Ile Arg Glu Leu  
 465 470 475 480  
 Val Gly His Lys Val Asn Leu Gln Met Val Tyr Asp Ser Pro Leu Cys  
 485 490 495  
 Arg Leu Asp Ala Glu Pro Arg Pro Pro Pro Thr Gln Glu Ala Ala  
 500 505 510

<210> 1061  
 <211> 228  
 <212> PRT  
 <213> Homo sapiens

<400> 1061  
 Arg Ala Ala Ser Thr Pro Arg Ala Ala Pro Gly Ala Ala Leu Leu Ser  
 1 5 10 15  
 Pro Pro Gly Leu Arg Ala Ala Pro Ala Ala Leu Val Met Gly Glu Gly  
 20 25 30  
 Thr Cys Glu Lys Arg Arg Asp Ala Glu Tyr Gly Ala Ser Pro Glu Gln  
 35 40 45  
 Val Ala Asp Asn Gly Asp Asp His Ser Glu Gly Gly Leu Val Glu Asn



1047

50                      55                      60  
 His Val Asp Ser Thr Met Asn Met Leu Gly Gly Gly Ser Ala Gly  
 65                      70                      75                      80  
 Arg Lys Pro Leu Lys Ser Gly Met Lys Glu Leu Ala Val Phe Arg Glu  
                     85                      90                      95  
 Lys Val Thr Glu Gln His Arg Gln Met Gly Lys Gly Gly Lys His His  
                     100                      105                      110  
 Leu Gly Leu Glu Glu Pro Lys Lys Leu Arg Pro Pro Pro Ala Arg Thr  
                     115                      120                      125  
 Pro Cys Gln Gln Glu Leu Asp Gln Val Leu Glu Arg Ile Ser Thr Met  
                     130                      135                      140  
 Arg Leu Pro Asp Glu Arg Gly Pro Leu Glu His Leu Tyr Ser Leu His  
 145                      150                      155                      160  
 Ile Pro Asn Cys Asp Lys His Gly Leu Tyr Asn Leu Lys Gln Cys Lys  
                     165                      170                      175  
 Met Ser Leu Asn Gly Gln Arg Gly Glu Cys Trp Cys Val Asn Pro Asn  
                     180                      185                      190  
 Thr Gly Lys Leu Ile Gln Gly Ala Pro Thr Ile Arg Gly Asp Pro Glu  
                     195                      200                      205  
 Cys His Leu Phe Tyr Asn Glu Gln Gln Glu Ala Arg Gly Val His Thr  
                     210                      215                      220  
 Gln Arg Met Gln  
 225

&lt;210&gt; 1062

&lt;211&gt; 324

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1062

Pro Arg Val Met Ala Met Ala Thr Lys Gly Gly Thr Val Lys Ala Ala  
 1                      5                      10                      15  
 Ser Gly Phe Asn Ala Met Glu Asp Ala Gln Thr Leu Arg Lys Ala Met  
                     20                      25                      30  
 Lys Gly Leu Gly Thr Asp Glu Asp Ala Ile Ile Ser Val Leu Ala Tyr  
                     35                      40                      45

1048

Arg Asn Thr Ala Gln Arg Gln Glu Ile Arg Thr Ala Tyr Lys Ser Thr  
 50 55 60

Ile Gly Arg Asp Leu Ile Asp Asp Leu Lys Ser Glu Leu Ser Gly Asn  
 65 70 75 80

Phe Glu Gln Val Ile Val Gly Met Met Thr Pro Thr Val Leu Tyr Asp  
 85 90 95

Val Gln Glu Leu Arg Arg Ala Met Lys Gly Ala Gly Thr Asp Glu Gly  
 100 105 110

Cys Leu Ile Glu Ile Leu Ala Ser Arg Thr Pro Glu Glu Ile Arg Arg  
 115 120 125

Ile Ser Gln Thr Tyr Gln Gln Gln Tyr Gly Arg Ser Leu Glu Asp Asp  
 130 135 140

Ile Arg Ser Asp Thr Ser Phe Met Phe Gln Arg Val Leu Val Ser Leu  
 145 150 155 160

Ser Ala Gly Gly Arg Asp Glu Gly Asn Tyr Leu Asp Asp Ala Leu Val  
 165 170 175

Arg Gln Asp Ala Gln Asp Leu Tyr Glu Ala Gly Glu Lys Lys Trp Gly  
 180 185 190

Thr Asp Glu Val Lys Phe Leu Thr Val Leu Cys Ser Arg Asn Arg Asn  
 195 200 205

His Leu Leu His Val Phe Asp Glu Tyr Lys Arg Ile Ser Gln Lys Asp  
 210 215 220

Ile Glu Gln Ser Ile Lys Ser Glu Thr Ser Gly Ser Phe Glu Asp Ala  
 225 230 235 240

Leu Leu Ala Ile Val Lys Cys Met Arg Asn Lys Ser Ala Tyr Phe Ala  
 245 250 255

Glu Lys Leu Tyr Lys Ser Met Lys Gly Leu Gly Thr Asp Asp Asn Thr  
 260 265 270

Leu Ile Arg Val Met Val Ser Arg Ala Glu Ile Asp Met Leu Asp Ile  
 275 280 285

Arg Ala His Phe Lys Arg Leu Tyr Gly Lys Ser Leu Tyr Ser Phe Ile  
 290 295 300

Lys Gly Asp Thr Ser Gly Asp Tyr Arg Lys Val Leu Leu Val Leu Cys  
 305 310 315 320

1049

Gly Gly Asp Asp

<210> 1063  
 <211> 355  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (1)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (3)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (37)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1063  
 Xaa Tyr Xaa Ile Pro Gly Ser Thr His Ala Ser Gly Lys Ile Leu Gly  
 1 5 10 15

Ser Gly Ile Ser Ser Ser Ser Val Leu His Gly Met Val Phe Lys Lys  
 20 25 30

Glu Thr Glu Val Xaa Val Thr Ser Val Lys Asp Ala Lys Ile Ala Val  
 35 40 45

Tyr Ser Cys Pro Phe Asp Gly Met Ile Thr Glu Thr Lys Gly Thr Val  
 50 55 60

Leu Ile Lys Thr Ala Glu Glu Leu Met Asn Phe Ser Lys Gly Glu Glu  
 65 70 75 80

Asn Leu Met Asp Ala Gln Val Lys Ala Ile Ala Asp Thr Gly Ala Asn  
 85 90 95

Val Val Val Thr Gly Gly Lys Val Ala Asp Met Ala Leu His Tyr Ala  
 100 105 110

Asn Lys Tyr Asn Ile Met Leu Val Arg Leu Asn Ser Lys Trp Asp Leu  
 115 120 125

1050

Arg Arg Leu Cys Lys Thr Val Gly Ala Thr Ala Leu Pro Arg Leu Thr  
 130 135 140  
 Pro Pro Val Leu Glu Glu Met Gly His Cys Asp Ser Val Tyr Leu Ser  
 145 150 155 160  
 Glu Val Gly Asp Thr Gln Val Val Val Phe Lys His Glu Lys Glu Asp  
 165 170 175  
 Gly Ala Ile Ser Thr Ile Val Leu Arg Gly Ser Thr Asp Asn Leu Met  
 180 185 190  
 Asp Asp Ile Glu Arg Ala Val Asp Asp Gly Val Asn Thr Phe Lys Val  
 195 200 205  
 Leu Thr Arg Asp Lys Arg Leu Val Pro Gly Gly Gly Ala Thr Glu Ile  
 210 215 220  
 Glu Leu Ala Lys Gln Ile Thr Ser Tyr Gly Glu Thr Cys Pro Gly Leu  
 225 230 235 240  
 Glu Gln Tyr Ala Ile Lys Lys Phe Ala Glu Ala Phe Glu Ala Ile Pro  
 245 250 255  
 Arg Ala Leu Ala Glu Asn Ser Gly Val Lys Ala Asn Glu Val Ile Ser  
 260 265 270  
 Lys Leu Tyr Ala Val His Gln Glu Gly Asn Lys Asn Val Gly Leu Asp  
 275 280 285  
 Ile Glu Ala Glu Val Pro Ala Val Lys Asp Met Leu Glu Ala Gly Ile  
 290 295 300  
 Leu Asp Thr Tyr Leu Gly Lys Tyr Trp Ala Ile Lys Leu Ala Thr Asn  
 305 310 315 320  
 Ala Ala Val Thr Val Leu Arg Val Asp Gln Ile Ile Met Ala Lys Pro  
 325 330 335  
 Ala Gly Gly Pro Lys Pro Pro Ser Gly Lys Lys Asp Trp Asp Asp Asp  
 340 345 350  
 Gln Asn Asp  
 355

&lt;210&gt; 1064

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

1051

&lt;400&gt; 1064

Ser Pro Phe Thr Leu His Cys Cys His Ser Thr Leu Tyr Asp Gly Arg  
 1 5 10 15  
 Thr Gly Ser Ser Arg Glu Asn Cys Thr Val Thr Thr Val Phe Phe Thr  
 20 25 30  
 Leu Phe Gln Gly Ser Leu Ser Pro Asp Ile Glu Glu Ile Ser Phe Arg  
 35 40 45  
 Pro Glu Thr Gln Arg Pro His Ser Pro Val Ile Lys Pro Arg Phe His  
 50 55 60  
 Ser Gly Pro Arg Ser Gly Ala Trp Pro Leu Leu Phe Gly Ser His Trp  
 65 70 75 80  
 Glu Ala His Trp Pro Trp Ile Ile Ser Ser Cys Thr Pro Gly Val Leu  
 85 90 95  
 Pro Ala Cys Leu Leu Ser Trp Thr Ala Val Cys Lys Lys Val Thr Lys  
 100 105 110  
 Thr

&lt;210&gt; 1065

&lt;211&gt; 634

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (325)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1065

Val Gln Gly Phe Glu Ser Ala Thr Phe Leu Gly Tyr Phe Lys Ser Gly  
 1 5 10 15  
 Leu Lys Tyr Lys Lys Gly Gly Val Ala Ser Gly Phe Lys His Val Val  
 20 25 30  
 Pro Asn Glu Val Val Val Gln Arg Leu Phe Gln Val Lys Gly Arg Arg  
 35 40 45  
 Val Val Arg Ala Thr Glu Val Pro Val Ser Trp Glu Ser Phe Asn Asn  
 50 55 60

1052

Gly Asp Cys Phe Ile Leu Asp Leu Gly Asn Asn Ile His Gln Trp Cys  
 65 70 75 80

Gly Ser Asn Ser Asn Arg Tyr Glu Arg Leu Lys Ala Thr Gln Val Ser  
 85 90 95

Lys Gly Ile Arg Asp Asn Glu Arg Ser Gly Arg Ala Arg Val His Val  
 100 105 110

Ser Glu Glu Gly Thr Glu Pro Glu Ala Met Leu Gln Val Leu Gly Pro  
 115 120 125

Lys Pro Ala Leu Pro Ala Gly Thr Glu Asp Thr Ala Lys Glu Asp Ala  
 130 135 140

Ala Asn Arg Lys Leu Ala Lys Leu Tyr Lys Val Ser Asn Gly Ala Gly  
 145 150 155 160

Thr Met Ser Val Ser Leu Val Ala Asp Glu Asn Pro Phe Ala Gln Gly  
 165 170 175

Ala Leu Lys Ser Glu Asp Cys Phe Ile Leu Asp His Gly Lys Asp Gly  
 180 185 190

Lys Ile Phe Val Trp Lys Gly Lys Gln Ala Asn Thr Glu Glu Arg Lys  
 195 200 205

Ala Ala Leu Lys Thr Ala Ser Asp Phe Ile Thr Lys Met Asp Tyr Pro  
 210 215 220

Lys Gln Thr Gln Val Ser Val Leu Pro Glu Gly Gly Glu Thr Pro Leu  
 225 230 235 240

Phe Lys Gln Phe Phe Lys Asn Trp Arg Asp Pro Asp Gln Thr Asp Gly  
 245 250 255

Leu Gly Leu Ser Tyr Leu Ser Ser His Ile Ala Asn Val Glu Arg Val  
 260 265 270

Pro Phe Asp Ala Ala Thr Leu His Thr Ser Thr Ala Met Ala Ala Gln  
 275 280 285

His Gly Met Asp Asp Asp Gly Thr Gly Gln Lys Gln Ile Trp Arg Ile  
 290 295 300

Glu Gly Ser Asn Lys Val Pro Val Asp Pro Ala Thr Tyr Gly Gln Phe  
 305 310 315 320

Tyr Gly Gly Asp Xaa Tyr Ile Ile Leu Tyr Asn Tyr Arg His Gly Gly  
 325 330 335

1053

Arg Gln Gly Gln Ile Ile Tyr Asn Trp Gln Gly Ala Gln Ser Thr Gln  
 340 345 350  
 Asp Glu Val Ala Ala Ser Ala Ile Leu Thr Ala Gln Leu Asp Glu Glu  
 355 360 365  
 Leu Gly Gly Thr Pro Val Gln Ser Arg Val Val Gln Gly Lys Glu Pro  
 370 375 380  
 Ala His Leu Met Ser Leu Phe Gly Gly Lys Pro Met Ile Ile Tyr Lys  
 385 390 395 400  
 Gly Gly Thr Ser Arg Glu Gly Gly Gln Thr Ala Pro Ala Ser Thr Arg  
 405 410 415  
 Leu Phe Gln Val Arg Ala Asn Ser Ala Gly Ala Thr Arg Ala Val Glu  
 420 425 430  
 Val Leu Pro Lys Ala Gly Ala Leu Asn Ser Asn Asp Ala Phe Val Leu  
 435 440 445  
 Lys Thr Pro Ser Ala Ala Tyr Leu Trp Val Gly Thr Gly Ala Ser Glu  
 450 455 460  
 Ala Glu Lys Thr Gly Ala Gln Glu Leu Leu Arg Val Leu Arg Ala Gln  
 465 470 475 480  
 Pro Val Gln Val Ala Glu Gly Ser Glu Pro Asp Gly Phe Trp Glu Ala  
 485 490 495  
 Leu Gly Gly Lys Ala Ala Tyr Arg Thr Ser Pro Arg Leu Lys Asp Lys  
 500 505 510  
 Lys Met Asp Ala His Pro Pro Arg Leu Phe Ala Cys Ser Asn Lys Ile  
 515 520 525  
 Gly Arg Phe Val Ile Glu Glu Val Pro Gly Glu Leu Met Gln Glu Asp  
 530 535 540  
 Leu Ala Thr Asp Asp Val Met Leu Leu Asp Thr Trp Asp Gln Val Phe  
 545 550 555 560  
 Val Trp Val Gly Lys Asp Ser Gln Glu Glu Lys Thr Glu Ala Leu  
 565 570 575  
 Thr Ser Ala Lys Arg Tyr Ile Glu Thr Asp Pro Ala Asn Arg Asp Arg  
 580 585 590  
 Arg Thr Pro Ile Thr Val Val Lys Gln Gly Phe Glu Pro Pro Ser Phe  
 595 600 605

1054

Val Gly Trp Phe Leu Gly Trp Asp Asp Asp Tyr Trp Ser Val Asp Pro  
 610 615 620

Leu Asp Arg Ala Met Ala Glu Leu Ala Ala  
 625 630

<210> 1066  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 1066  
 Arg Ala Arg Gly Arg Cys Arg Arg Ser Pro Asp Gly Val Gly Ile Glu  
 1 5 10 15  
 Ala Pro Arg Lys Lys Val Lys Tyr Gln Glu Ile Gln Val Glu Glu Pro  
 20 25 30  
 Tyr Tyr Asp Cys His Glu Cys Thr Glu Thr Phe Thr Ser Ser Thr Ala  
 35 40 45  
 Phe Ser Glu His Leu Lys Thr His Ala Ser Met Ile Ile Phe Glu Pro  
 50 55 60  
 Ala Asn Ala Phe Gly Glu Cys Ser Gly Tyr Ile Glu Arg Ala Ser Thr  
 65 70 75 80  
 Ser Thr Gly Gly Ala Asn Gln Ala Asp Glu Lys Tyr Phe Lys Cys Asp  
 85 90 95  
 Val Cys Gly Gln Leu Phe Asn Asp Arg Leu Ser Leu Ala Arg His Gln  
 100 105 110  
 Asn Thr His Thr Gly  
 115

<210> 1067  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

<400> 1067  
 Pro Glu Gln Arg Gly Ser Ser Met Ala His Gly Pro Gly Ala Leu Met  
 1 5 10 15  
 Leu Lys Cys Val Val Val Gly Asp Gly Ala Val Gly Lys Thr Cys Leu  
 20 25 30



1055

Leu Met Ser Tyr Ala Asn Asp Ala Phe Pro Glu Ser Thr Cys Pro Pro  
 35 40 45  
 Ser Ser Thr Thr Thr Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser  
 50 55 60  
 Tyr Pro Met Thr Asp Val Phe Leu Ile Cys Phe Ser Val Val Asn Pro  
 65 70 75 80  
 Ala Ser Phe Gln Asn Val Lys Glu Glu Trp Val Pro Glu Leu Lys Glu  
 85 90 95  
 Tyr Ala Pro Asn Val Pro Phe Leu Leu Ile Gly Thr Gln Ile Asp Leu  
 100 105 110  
 Arg Asp Asp Pro Lys Thr Leu Ala Arg Leu Asn Asp Met Lys Glu Lys  
 115 120 125  
 Pro Ile Cys Val Glu Gln Gly Gln Lys Leu Ala Lys Glu Ile Gly Ala  
 130 135 140  
 Cys Cys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Thr  
 145 150 155 160  
 Val Phe Asp Glu Ala Ile Ile Ala Ile Leu Thr Pro Lys Lys His Thr  
 165 170 175  
 Val Lys Lys Arg Ile Gly Ser Arg Cys Ile Asn Cys Cys Leu Ile Thr  
 180 185 190

&lt;210&gt; 1068

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1068

Ser Arg Trp Ala Arg Arg Asp Pro Gln Glu Arg Arg Glu Arg Gly Thr  
 1 5 10 15  
 Arg Val Gln Ser Ser Gly Thr Trp Ile Gly Ala Gly Ala Met Gly Gly  
 20 25 30  
 Glu Gln Glu Glu Glu Arg Phe Asp Gly Met Leu Leu Ala Met Ala Gln  
 35 40 45

1056

Gln His Glu Gly Gly Val Gln Glu Leu Val Asn Thr Phe Phe Ser Phe  
50 55 60

Leu Arg Arg Lys Thr Asp Phe Phe Ile Gly Gly Glu Glu Gly Met Ala  
65 70 75 80

Glu Lys Leu Ile Thr Gln Thr Phe Ser His His Asn Gln Leu Ala Gln  
85 90 95

Lys Thr Arg Arg Glu Lys Arg Ala Arg Gln Glu Ala Glu Arg Arg Glu  
100 105 110

Lys Ala Glu Arg Ala Ala Arg Leu Ala Lys Glu Ala Lys Ser Glu Thr  
115 120 125

Ser Gly Pro Gln Ile Lys Glu Leu Thr Asp Glu Glu Ala Glu Arg Leu  
130 135 140

Gln Leu Glu Ile Asp Gln Lys Lys Asp Ala Glu Asn His Glu Ala Gln  
145 150 155 160

Leu Lys Asn Gly Ser Leu Asp Ser Pro Gly Lys Gln Asp Thr Glu Glu  
165 170 175

Asp Glu Glu Glu Asp Glu Lys Asp Lys Gly Lys Leu Lys Pro Asn Leu  
180 185 190

Gly Asn Gly Ala Asp Leu Pro Asn Tyr Arg Trp Thr Gln Thr Leu Ser  
195 200 205

Glu Leu Asp Leu Ala Val Pro Phe Cys Val Asn Phe Arg Leu Lys Gly  
210 215 220

Lys Asp Met Val Val Asp Ile Gln Arg Arg His Leu Arg Val Gly Leu  
225 230 235 240

Lys Gly Gln Pro Ala Ile Ile Asp Gly Glu Leu Tyr Asn Glu Val Lys  
245 250 255

Val Glu Glu Ser Ser Trp Leu Ile Glu Asp Gly Lys Val Val Thr Val  
260 265 270

His Leu Glu Lys Ile Asn Lys Met Glu Trp Trp Ser Arg Leu Val Ser  
275 280 285

Ser Asp Pro Glu Ile Asn Thr Lys Lys Ile Asn Pro Glu Asn Ser Lys  
290 295 300

Leu Ser Asp Leu Asp Ser Glu Thr Arg Ser Met Val Glu Lys Met Met  
305 310 315 320

Tyr	Asp	Gln	Arg	Gln	Lys	Ser	Met	Gly	Leu	Pro	Thr	Ser	Asp	Glu	Gln
				325					330					335	
Lys	Lys	Gln	Glu	Ile	Leu	Lys	Lys	Phe	Met	Asp	Gln	His	Pro	Glu	Met
			340					345					350		
Asp	Phe	Ser	Lys	Ala	Lys	Phe	Asn								
		355					360								

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<210> 1069
<211> 174
<212> PRT      1 1069 of the naturally occurring L-amino acids
<213> Homo sapiens
...
<220> SITE
<221> SITE
<222> (52) 1069 of the naturally occurring L-amino acids
<223> Xaa equals any of the naturally occurring L-amino acids

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BNSDOCID: <WO\_\_\_0055350A1\_I\_>

1058

Arg Trp Glu Pro Pro Ser Asn Gln Leu Leu Tyr Pro Trp Gly  
 165 170

&lt;210&gt; 1070

&lt;211&gt; 445

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1070

Pro Arg Gly Leu Thr Gly Leu Trp Arg Ser Ser Leu Pro Ile Arg Lys  
 1 5 10 15

Leu Gln Leu Pro Pro Asp Ala Leu Lys Met Ala Thr Ser Leu Gly Ser  
 20 25 30

Asn Thr Tyr Asn Arg Gln Asn Trp Glu Asp Ala Asp Phe Pro Ile Leu  
 35 40 45

Cys Gln Thr Cys Leu Gly Glu Asn Pro Tyr Ile Arg Met Thr Lys Glu  
 50 55 60

Lys Tyr Gly Lys Glu Cys Lys Ile Cys Ala Arg Pro Phe Thr Val Phe  
 65 70 75 80

Arg Trp Cys Pro Gly Val Arg Met Arg Phe Lys Lys Thr Glu Val Cys  
 85 90 95

Gln Thr Cys Ser Lys Leu Lys Asn Val Cys Gln Thr Cys Leu Leu Asp  
 100 105 110

Leu Glu Tyr Gly Leu Pro Ile Gln Val Arg Asp Ala Gly Leu Ser Phe  
 115 120 125

Lys Asp Asp Met Pro Lys Ser Asp Val Asn Lys Glu Tyr Tyr Thr Gln  
 130 135 140

Asn Met Glu Arg Glu Ile Ser Asn Ser Asp Gly Thr Arg Pro Val Gly  
 145 150 155 160

Met Leu Gly Lys Ala Thr Ser Thr Ser Asp Met Leu Leu Lys Leu Ala  
 165 170 175

Arg Thr Thr Pro Tyr Tyr Lys Arg Asn Arg Pro His Ile Cys Ser Phe  
 180 185 190

Trp Val Lys Gly Glu Cys Lys Arg Gly Glu Glu Cys Pro Tyr Arg His  
 195 200 205

1059

Glu Lys Pro Thr Asp Pro Asp Asp Pro Leu Ala Asp Gln Asn Ile Lys  
 210 215 220  
 Asp Arg Tyr Tyr Gly Ile Asn Asp Pro Val Ala Asp Lys Leu Leu Lys  
 225 230 235 240  
 Arg Ala Ser Thr Met Pro Arg Leu Asp Pro Pro Glu Asp Lys Thr Ile  
 245 250 255  
 Thr Thr Leu Tyr Val Gly Gly Leu Gly Asp Thr Ile Thr Glu Thr Asp  
 260 265 270  
 Leu Arg Asn His Phe Tyr Gln Phe Gly Glu Ile Arg Thr Ile Thr Val  
 275 280 285  
 Val Gln Arg Gln Gln Cys Ala Phe Ile Gln Phe Ala Thr Arg Gln Ala  
 290 295 300  
 Ala Glu Val Ala Ala Glu Lys Ser Phe Asn Lys Leu Ile Val Asn Gly  
 305 310 315 320  
 Arg Arg Leu Asn Val Lys Trp Gly Arg Ser Gln Ala Ala Arg Gly Lys  
 325 330 335  
 Glu Lys Glu Lys Asp Gly Thr Thr Asp Ser Gly Ile Lys Leu Glu Pro  
 340 345 350  
 Val Pro Gly Leu Pro Gly Ala Leu Pro Pro Pro Pro Ala Ala Glu Glu  
 355 360 365  
 Glu Ala Ser Ala Asn Tyr Phe Asn Leu Pro Pro Ser Gly Pro Pro Ala  
 370 375 380  
 Val Val Asn Ile Ala Leu Pro Pro Pro Pro Gly Ile Ala Pro Pro Pro  
 385 390 395 400  
 Pro Pro Gly Phe Gly Pro His Met Phe His Pro Met Gly Pro Pro Pro  
 405 410 415  
 Pro Phe Met Arg Ala Pro Gly Pro Ile His Tyr Pro Ser Gln Asp Pro  
 420 425 430  
 Gln Arg Met Gly Ala His Ala Gly Lys His Ser Ser Pro  
 435 440 445  
 <210> 1071  
 <211> 346  
 <212> PRT  
 <213> Homo sapiens

1060

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (286)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (287)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (291)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (294)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1071

Trp	Ser	Arg	Leu	Cys	Leu	Leu	Lys	Gln	Tyr	Leu	Phe	Thr	Met	Lys	Leu
1				5					10					15	

Gln	Ser	Pro	Glu	Phe	Gln	Ser	Leu	Phe	Thr	Glu	Gly	Leu	Lys	Ser	Leu
			20					25					30		

Thr	Glu	Leu	Phe	Val	Lys	Glu	Asn	His	Glu	Leu	Arg	Ile	Ala	Gly	Gly
		35					40					45			

Ala	Val	Arg	Asp	Leu	Leu	Asn	Gly	Val	Lys	Pro	Gln	Asp	Ile	Asp	Phe
	50					55					60				

Ala	Thr	Thr	Ala	Thr	Pro	Thr	Gln	Met	Lys	Glu	Met	Phe	Gln	Ser	Ala
65					70					75					80

Gly	Ile	Arg	Met	Ile	Asn	Asn	Arg	Gly	Glu	Lys	His	Gly	Thr	Ile	Thr
			85						90					95	

Ala	Arg	Leu	His	Glu	Glu	Asn	Phe	Glu	Ile	Thr	Thr	Leu	Arg	Ile	Asp
		100						105					110		

Val	Thr	Thr	Asp	Gly	Arg	His	Ala	Glu	Val	Glu	Phe	Thr	Thr	Asp	Trp
		115					120					125			

Gln	Lys	Asp	Ala	Glu	Arg	Arg	Asp	Leu	Thr	Ile	Asn	Ser	Met	Phe	Leu
	130						135						140		

Gly	Phe	Asp	Gly	Thr	Leu	Phe	Asp	Tyr	Phe	Asn	Gly	Tyr	Glu	Asp	Leu
145					150					155					160

1061

Lys Asn Lys Lys Val Arg Phe Val Gly His Ala Lys Gln Arg Ile Gln  
165 170 175

Glu Asp Tyr Leu Arg Ile Leu Arg Tyr Phe Arg Phe Tyr Gly Arg Ile  
180 185 190

Val Asp Lys Pro Gly Asp His Asp Pro Glu Thr Leu Glu Ala Ile Ala  
195 200 205

Glu Asn Ala Lys Gly Leu Ala Gly Ile Ser Gly Glu Arg Ile Trp Val  
210 215 220

Glu Leu Lys Lys Ile Leu Val Gly Asn His Val Asn His Leu Ile His  
225 230 235 240

Leu Ile Tyr Asp Leu Asp Val Ala Pro Tyr Ile Gly Leu Pro Ala Asn  
245 250 255

Ala Ser Leu Glu Glu Phe Asp Lys Val Ser Lys Asn Val Asp Gly Phe  
260 265 270

Ser Pro Lys Pro Val Thr Leu Leu Ala Ser Leu Phe Lys Xaa Xaa Asp  
275 280 285

Asp Val Xaa Lys Leu Xaa Leu Arg Leu Lys Ile Ala Lys Glu Glu Lys  
290 295 300

Asn Leu Gly Leu Phe Ile Val Lys Asn Arg Lys Asp Leu Ile Lys Ala  
305 310 315 320

Thr Asp Ser Ser Asp Pro Leu Lys Pro Tyr Gln Asp Phe Ile Ile Asp  
325 330 335

Ser Arg Glu Pro Asp Ala His Ser Cys Met  
340 345

&lt;210&gt; 1072

&lt;211&gt; 404

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (77)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids.

&lt;220&gt;

&lt;221&gt; SITE

1062

&lt;222&gt; (81)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1072

Glu Asp Ser Leu Asn Leu Asp Leu Thr Pro Arg Met Leu Arg Arg Leu  
 1 5 10 15

Leu Glu Arg Pro Cys Thr Leu Ala Leu Leu Val Gly Ser Gln Leu Ala  
 20 25 30

Val Met Met Tyr Leu Ser Leu Gly Gly Phe Arg Ser Leu Ser Ala Leu  
 35 40 45

Phe Gly Arg Asp Gln Gly Pro Thr Phe Asp Tyr Ser His Pro Arg Asp  
 50 55 60

Val Tyr Ser Asn Leu Ser His Leu Pro Gly Ala Pro Xaa Gly Pro Pro  
 65 70 75 80

Xaa Pro Gln Gly Leu Pro Tyr Cys Pro Glu Arg Ser Pro Leu Leu Val  
 85 90 95

Gly Pro Val Ser Val Ser Phe Ser Pro Val Pro Ser Leu Ala Glu Ile  
 100 105 110

Val Glu Arg Asn Pro Arg Val Glu Pro Gly Gly Arg Tyr Arg Pro Ala  
 115 120 125

Gly Cys Glu Pro Arg Ser Arg Thr Ala Ile Ile Val Pro His Arg Ala  
 130 135 140

Arg Glu His His Leu Arg Leu Leu Leu Tyr His Leu His Pro Phe Leu  
 145 150 155 160

Gln Arg Gln Gln Leu Ala Tyr Gly Ile Tyr Val Ile His Gln Ala Gly  
 165 170 175

Asn Gly Thr Phe Asn Arg Ala Lys Leu Leu Asn Val Gly Val Arg Glu  
 180 185 190

Ala Leu Arg Asp Glu Glu Trp Asp Cys Leu Phe Leu His Asp Val Asp  
 195 200 205

Leu Leu Pro Glu Asn Asp His Asn Leu Tyr Val Cys Asp Pro Arg Gly  
 210 215 220

Pro Arg His Val Ala Val Ala Met Asn Lys Phe Gly Tyr Ser Leu Pro  
 225 230 235 240

Tyr Pro Gln Tyr Phe Gly Gly Val Ser Ala Leu Thr Pro Asp Gln Tyr  
 245 250 255



1063

Leu Lys Met Asn Gly Phe Pro Asn Glu Tyr Trp Gly Trp Gly Gly Glu  
260 265 270

Asp Asp Asp Ile Ala Thr Arg Val Arg Leu Ala Gly Met Lys Ile Ser  
275 280 285

Arg Pro Pro Thr Ser Val Gly His Tyr Lys Met Val Lys His Arg Gly  
290 295 300

Asp Lys Gly Asn Glu Glu Asn Pro His Arg Phe Asp Leu Leu Val Arg  
305 310 315 320

Thr Gln Asn Ser Trp Thr Gln Asp Gly Met Asn Ser Leu Thr Tyr Gln  
325 330 335

Leu Leu Ala Arg Glu Leu Gly Pro Leu Tyr Thr Asn Ile Thr Ala Asp  
340 345 350

Ile Gly Thr Asp Pro Arg Gly Pro Arg Ala Pro Ser Gly Pro Arg Tyr  
355 360 365

Pro Pro Gly Ser Ser Gln Ala Phe Arg Gln Glu Met Leu Gln Arg Arg  
370 375 380

Pro Pro Ala Arg Pro Gly Pro Leu Ser Thr Ala Asn His Thr Ala Leu  
385 390 395 400

Arg Gly Ser His

<210> 1073

<211> 217

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1073

Asn Lys Glu Gln Leu Met Asp Lys Ser Gly Ile Asp Ser Leu Asp His  
1 5 10 15

Val Thr Ser Asp Ala Val Glu Leu Ala Asn Arg Ser Asp Asn Ser Ser  
20 25 30

Asp Ser Ser Leu Phe Lys Thr Gln Cys Ile Pro Tyr Ser Pro Lys Gly

1064

35 40 45  
Glu Lys Arg Asn Pro Ile Arg Lys Phe Val Arg Thr Pro Glu Ser Val  
50 55 60  
His Ala Ser Xaa Ser Ser Ser Asp Ser Ser Phe Glu Pro Ile Pro Leu  
65 70 75 80  
Thr Ile Lys Ala Ile Phe Glu Arg Phe Lys Asn Arg Lys Lys Arg Tyr  
85 90 95  
Lys Lys Lys Lys Lys Arg Arg Tyr Gln Pro Thr Gly Arg Pro Arg Gly  
100 105 110  
Arg Pro Glu Gly Arg Arg Asn Pro Ile Tyr Ser Leu Ile Asp Lys Lys  
115 120 125  
Lys Gln Phe Arg Ser Arg Gly Ser Gly Phe Pro Phe Leu Glu Ser Glu  
130 135 140  
Asn Glu Lys Asn Ala Pro Trp Arg Lys Ile Leu Thr Phe Glu Gln Ala  
145 150 155 160  
Val Ala Arg Gly Phe Phe Asn Tyr Ile Glu Lys Leu Lys Tyr Glu His  
165 170 175  
His Leu Lys Glu Ser Leu Lys Gln Met Asn Val Gly Glu Asp Leu Glu  
180 185 190  
Asn Glu Asp Phe Asp Ser Arg Arg Tyr Lys Phe Leu Asp Asp Asp Gly  
195 200 205  
Ser Ile Ser Pro Ile Glu Glu Ser Thr  
210 215

&lt;210&gt; 1074

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (110)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (122)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

1065

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (123)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (125)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (128)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (147)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1074

Thr His Tyr Arg Ala Lys Leu Val Arg Leu Pro Gly Thr Gly Ser Gly

1 5 10 15

Asn Ser Arg Val Asp Pro Arg Val Arg Glu Gln Pro Ser Pro Ala Ser

20 25 30

Ser Ala Pro Gly Gln Leu Asn Ser Cys Gln Asp Val Leu Pro Ala Glu

35 40 45

Pro Ala Ala Val Pro Thr Pro Thr Gln Val Ser Leu Thr Gln Val Ser

50 55 60

Pro Lys Glu Pro Ser Thr Val Ser Ala Ser Ser Phe Leu Trp Leu Cys

65 70 75 80

Pro Lys Leu Trp Gly Leu Trp Pro Ser Ser Glu Gly Gly Cys Phe Leu

85 90 95

Asn His His Arg Arg His His Arg Cys Arg Arg Gln Arg Xaa Asn Ser

100 105 110

Cys Asp Arg Ala Val Val Ser Lys Ala Xaa Xaa Leu Xaa Ala Ala Xaa

115 120 125

Phe Trp Gly Leu Leu Leu Ile Gln Ile Leu Met Leu Arg Gln Ala Ile

130 135 140

Phe Gly Xaa Asn Lys Asn Ser Gln Glu Ala Lys Asn Ser Pro Ile Trp

145 150 155 160

1066

Lys

&lt;210&gt; 1075

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1075

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Ser Ser Ser Trp His Ala Arg Tyr Thr Val Leu Thr Tyr Leu Gln Thr
  1             5             10             15

Met Val Phe Tyr Asn Leu Phe Ile Phe Leu Asn Asn Glu Asp Ala Val
      20             25             30

Lys Asp Ile Arg Trp Leu Val Ile Ser Leu Leu Glu Asp Glu Gln Leu
      35             40             45

Glu Val Arg Glu Met Ala Ala Thr Thr Leu Ser Gly Leu Leu Gln Cys
      50             55             60

Asn Phe Leu Thr Met Asp Ser Pro Met Gln Ile His Phe Glu Gln Leu
      65             70             75             80

Cys Lys Thr Lys Leu Pro Lys Lys Arg Lys Arg Asp Pro Gly Ser Val
      85             90             95

Gly Asp Thr Ile Pro Ser Ala Glu Leu Val Lys Arg His Ala Gly Val
      100            105            110

Leu Gly Leu Gly Ala Cys Val Leu Ser Ser Pro Tyr Asp Val Pro Thr
      115            120            125

Trp Met Pro Gln Leu Leu Met Asn Leu Ser Ala His Leu Asn Asp Pro
      130            135            140

Gln Pro Ile Glu Met Thr Val Lys Lys Thr Leu Ser Asn Phe Arg Arg
      145            150            155            160

Leu Thr Met Thr Thr Gly Arg Asn Ile Asn Ser Asn Ser Leu Met Thr
      165            170            175

Asn Cys Leu Phe Ser Pro Ile Phe Leu Cys His His Ala Ile Met His
      180            185            190

Arg Lys Met Thr Ser Pro His Phe Arg Leu Phe Ser Ser Lys Ile Pro
      195            200            205

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1067

His Pro Gln Val Pro Ser Val Val Ala Leu Cys Lys Phe  
 210 215 220

&lt;210&gt; 1076

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt; . . . . .

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE . . . . .

&lt;222&gt; (135)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (163)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (166)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1076

Ala Arg Gly Ala Arg Val Arg Ala Cys Ala Ser Leu Gly Ser Trp Arg  
 1 5 10 15

Gly Pro Arg Gly Glu Gly Trp Lys Met Ser Met Asp Val Thr Phe Leu  
 20 25 30

Gly Thr Gly Ala Ala Tyr Pro Ser Pro Thr Arg Gly Ala Ser Ala Val  
 35 40 45

Val Leu Arg Cys Glu Gly Glu Xaa Trp Leu Phe Asp Cys Gly Glu Gly  
 50 55 60

Thr Gln Thr Gln Leu Met Lys Ser Gln Leu Lys Ala Gly Arg Ile Thr  
 65 70 75 80

Lys Ile Phe Ile Thr His Leu His Gly Asp His Phe Phe Gly Leu Pro  
 85 90 95

Gly Leu Leu Cys Thr Ile Ser Leu Gln Ser Gly Ser Met Val Ser Lys  
 100 105 110

1068

Gln Pro Ile Glu Ile Tyr Gly Pro Val Gly Phe Gly Thr Leu Ser Gly  
 115 120 125

Glu Pro Trp Asn Ser Leu Xaa Arg Glu Leu Val Phe His Tyr Val Val  
 130 135 140

His Glu Leu Val Pro Thr Ala Asp Gln Cys Pro Ala Glu Gly Thr Lys  
 145 150 155 160

Arg Ile Xaa Ala Cys Xaa  
 165

<210> 1077

<211> 239

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1077

Gly Leu Arg Ala Leu Ser Gln His Thr Asp Leu Ser Pro Leu Ser Pro  
 1 5 10 15

Lys Thr Pro Ala Pro Ser Met Arg Xaa Lys Met Gly Asn Gly Thr Glu  
 20 25 30

Glu Asp Tyr Asn Phe Val Phe Lys Val Val Leu Ile Gly Glu Ser Gly  
 35 40 45

Val Gly Lys Thr Asn Leu Leu Ser Arg Phe Thr Arg Asn Glu Phe Ser  
 50 55 60

His Asp Ser Arg Thr Thr Ile Gly Val Glu Phe Ser Thr Arg Thr Val  
 65 70 75 80

Met Leu Gly Thr Ala Ala Val Lys Ala Gln Ile Trp Asp Thr Ala Gly  
 85 90 95

Leu Glu Arg Tyr Arg Ala Ile Thr Ser Ala Tyr Tyr Arg Gly Ala Val  
 100 105 110

Gly Ala Leu Leu Val Phe Asp Leu Thr Lys His Gln Thr Tyr Ala Val  
 115 120 125

Val Glu Arg Trp Leu Lys Glu Leu Tyr Asp His Ala Glu Ala Thr Ile

1069

130                      135                      140  
 Val Val Met Leu Val Gly Asn Lys Ser Asp Leu Ser Gln Ala Arg Glu  
 145                      150                      155                      160  
 Val Pro Thr Glu Glu Ala Arg Met Phe Ala Glu Asn Asn Gly Leu Leu  
                     165                      170                      175  
 Phe Leu Glu Thr Ser Ala Leu Asp Ser Thr Asn Val Glu Leu Ala Phe  
                     180                      185                      190  
 Glu Thr Val Leu Lys Glu Ile Phe Ala Lys Val Ser Lys Gln Arg Gln  
                     195                      200                      205  
 Asn Ser Ile Arg Thr Asn Ala Ile Thr Ser Gly Ser Ala Gln Ala Gly  
                     210                      215                      220  
 Gln Glu Pro Gly Pro Gly Glu Lys Arg Ala Cys Cys Ile Ser Leu  
 225                      230                      235

&lt;210&gt; 1078

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (123)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1078

Ile Leu Lys Gly Ser Ser Gly Ser Val Trp Leu Arg Asn Leu Gln Leu  
 1                      5                      10                      15

Gly Leu Phe Gly Thr Ala Leu Gly Leu Val Gly Leu Trp Trp Ala Glu  
                     20                      25                      30

Gly Thr Ala Val Ala Thr Arg Gly Phe Phe Phe Gly Tyr Thr Pro Ala  
                     35                      40                      45

Val Trp Gly Val Val Leu Asn Gln Ala Phe Gly Gly Leu Leu Val Ala  
                     50                      55                      60

Val Val Val Lys Tyr Ala Asp Asn Ile Leu Lys Gly Phe Ala Thr Ser  
                     65                      70                      75                      80

Leu Ser Ile Val Leu Ser Thr Val Ala Ser Ile Arg Leu Phe Gly Phe  
                     85                      90                      95

1070

His Val Asp Pro Leu Phe Ala Leu Gly Ala Gly Leu Val Ile Gly Ala  
                   100                  105                  110

Val Tyr Leu Tyr Ser Leu Pro Arg Gly Ala Xaa Lys Ala Ile Ala Ser  
                   115                  120                  125

Ala Ser Ala Ser Ala Ser Gly Pro Cys Val His Gln Gln Pro Pro Gly  
                   130                  135                  140

Gln Pro Pro Pro Pro Gln Leu Ser Ser His Arg Gly Asp Leu Ile Thr  
                   145                  150                  155                  160

Glu Pro Phe Leu Pro Lys Ser Val Leu Val Lys  
                   165                  170

&lt;210&gt; 1079

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (59)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1079

Arg Arg Val Cys His Ser Ser Pro His Leu Ser Ser Pro Arg Ala Ala  
   1                  5                  10                  15

Cys Glu Gln Gln Ala Val Ala Leu Thr Leu Gln Glu Asp Arg Ala Ser  
                   20                  25                  30

Leu Thr Leu Ser Gly Gly Pro Ser Ala Leu Ala Phe Asp Leu Ser Lys  
                   35                  40                  45

Val Pro Gly Pro Glu Ala Ala Pro Arg Leu Xaa Ala Leu Thr Leu Gly  
                   50                  55                  60

Leu Ala Lys Arg Val Trp Ser Leu Glu Arg Arg Leu Ala Ala Ala Glu  
                   65                  70                  75                  80

Glu Thr Ala Val Ser Pro Arg Lys Ser Pro Arg Pro Ala Gly Pro Gln  
                   85                  90                  95

Leu Phe Leu Pro Asp Pro Asp Pro Gln Arg Gly Gly Pro Gly Pro Gly  
                   100                  105                  110

Val Arg Arg Arg Cys Pro Gly Glu Ser Leu Ile Asn Pro Gly Phe Lys  
                   115                  120                  125



1071

Ser Lys Lys Pro Ala Gly Gly Val Asp Phe Asp Glu Thr  
 130 135 140

&lt;210&gt; 1080

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1080

Ala Val Glu Ser Arg Xaa Pro Gly Trp Asn His His Gly Ile Gln Phe  
 1 5 10 15

Pro Cys Gly Ser Val Trp Leu Glu His Ala Ile Ala Met Ile Cys Gly  
 20 25 30

Asn Val Cys Leu Trp Lys Gly Ala Pro Thr Thr Ser Leu Ile Ser Val  
 35 40 45

Ala Val Thr Lys Ile Ile Ala Lys Val Leu Glu Asp Asn Lys Leu Pro  
 50 55 60

Gly Ala Ile Cys Ser Leu Thr Cys Gly Gly Ala Asp Ile Gly Thr Ala  
 65 70 75 80

Met Ala Lys Asp Glu Arg Val Asn Leu Leu Ser Phe Thr Gly Ser Thr  
 85 90 95

Gln Val Gly Lys Gln Val Gly Leu Met Val Gln Glu Arg Phe Gly Arg  
 100 105 110

Ser Leu Leu Glu Leu Gly Gly Asn Asn Ala Ile Ile Ala Phe Glu Asp  
 115 120 125

Ala Asp Leu Ser Leu Val Val Pro Ser Ala Leu Phe Ala Ala Val Gly  
 130 135 140

Thr Ala Gly Gln Arg Cys Thr Thr Ala Arg Arg Leu Phe Ile His Glu  
 145 150 155 160

Ser Ile His Asp Glu Val Val Asn Arg Leu Lys Lys Ala Tyr Ala Gln  
 165 170 175

Ile Arg Val Gly Asn Pro Trp Asp Pro Asn Val Leu Tyr Gly Pro Leu

1072

180	185	190
His Thr Lys Gln Ala Val Ser Met Phe Leu Gly Ala Val Glu Glu Ala		
195	200	205
Lys Lys Glu Gly Gly Thr Val Val Tyr Gly Gly Lys Val Met Asp Arg		
210	215	220
Pro Gly Asn Tyr Val Glu Pro Thr Ile Val Thr Gly Leu Gly His Asp		
225	230	235
Ala Ser Ile Ala His Thr Glu Thr Phe Ala Pro Ile Leu Tyr Val Phe		
245	250	255
Lys Phe Lys Asn Glu Glu Glu Val Phe Ala Trp Asn Asn Glu Val Lys		
260	265	270
Gln Gly Leu Ser Ser Ser Ile Phe Thr Lys Asp Leu Gly Arg Ile Phe		
275	280	285
Arg Trp Leu Gly Pro Lys Gly Ser Asp Cys Gly Ile Val Asn Val Asn		
290	295	300
Ile Pro Thr Ser Gly Ala Glu Ile Gly Gly Ala Phe Gly Gly Glu Lys		
305	310	315
His Thr Gly Gly Gly Arg Glu Ser Gly Ser Asp Ala Trp Lys Gln Tyr		
325	330	335
Met Arg Arg Ser Thr Cys Thr Ile Asn Tyr Ser Lys Asp Leu Pro Leu		
340	345	350
Ala Gln Gly Ile Lys Phe Gln		
355		

&lt;210&gt; 1081

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1081

Ala Val Pro Leu Leu Gly Arg Pro Thr Arg Pro Val Gly Pro Arg Ala		
1	5	10
Ala Leu Thr Met Thr Gln Gln Gly Ala Ala Leu Gln Asn Tyr Asn Asn		
20	25	30
Glu Leu Val Lys Cys Ile Glu Glu Leu Cys Gln Lys Arg Glu Glu Leu		
35	40	45

1073

Cys Arg Gln Ile Gln Glu Glu Glu Asp Glu Lys Gln Arg Leu Gln Asn  
 50 55 60  
 Glu Val Arg Gln Leu Thr Glu Lys Leu Ala Arg Val Asn Glu Asn Leu  
 65 70 75 80  
 Ala Arg Lys Ile Ala Ser Arg Asn Glu Phe Asp Arg Thr Ile Ala Glu  
 85 90 95  
 Thr Glu Ala Ala Tyr Leu Lys Ile Leu Glu Ser Ser Gln Thr Leu Leu  
 100 105 110  
 Ser Val Leu Lys Arg Glu Ala Gly Asn Leu Thr Lys Ala Thr Ala Pro  
 115 120 125  
 Asp Gln Lys Ser Ser Gly Gly Arg Asp Ser  
 130 135

&lt;210&gt; 1082

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1082

Ser Pro Ile Ser Asn Cys Glu Ile Thr Ile Thr Asp Pro Gly Lys Phe  
 1 5 10 15  
 Tyr Asn Ser Asn Ser Val Phe Ser Arg Gly Asn Met Ala Lys Val Phe  
 20 25 30  
 Ser Phe Ile Leu Val Thr Thr Ala Leu Xaa Met Gly Arg Glu Ile Ser  
 35 40 45  
 Ala Leu Glu Asp Cys Ala Gln Glu Gln Met Arg Leu Arg Ala Gln Val  
 50 55 60  
 Arg Leu Leu Glu Thr Arg Val Lys Gln Gln Gln Val Lys Ile Lys Gln  
 65 70 75 80  
 Leu Leu Gln Glu Asn Glu Val Gln Phe Leu Asp Lys Gly Asp Glu Asn  
 85 90 95  
 Thr Val Val Asp Leu Gly Ser Lys Arg Gln Tyr Ala Asp Cys Ser Glu

1074

100	105	110
Ile Phe Asn Asp Gly Tyr Lys Leu Ser Gly Phe Tyr Lys Ile Lys Pro		
115	120	125
Leu Gln Ser Pro Ala Glu Phe Ser Val Tyr Cys Asp Met Ser Asp Gly		
130	135	140
Gly Gly Trp Thr Val Ile Gln Arg Arg Ser Asp Gly Ser Glu Asn Phe		
145	150	155
Asn Arg Gly Trp Lys Asp Tyr Glu Asn Gly Phe Gly Asn Phe Val Gln		
165	170	175
Lys His Gly Glu Tyr Trp Leu Gly Asn Lys Asn Leu His Phe Leu Thr		
180	185	190
Thr Gln Glu Asp Tyr Thr Leu Lys Ile Asp Leu Ala Asp Phe Glu Lys		
195	200	205
Asn Ser Arg Tyr Ala Gln Tyr Lys Asn Phe Lys Val Gly Asp Glu Lys		
210	215	220
Asn Phe Tyr Glu Leu Asn Ile Gly Glu Tyr Ser Gly Thr Ala Gly Asp		
225	230	235
Ser Leu Ala Gly Asn Phe His Pro Glu Val Gln Trp Trp Ala Ser His		
245	250	255
Gln Arg Met Lys Phe Ser Thr Trp Asp Arg Asp His Asp Asn Tyr Glu		
260	265	270
Gly Asn Cys Ala Glu Glu Asp Gln Ser Gly Trp Trp Phe Asn Arg Cys		
275	280	285
His Ser Ala Asn Leu Asn Gly Val Tyr Tyr Ser Gly Pro Tyr Thr Ala		
290	295	300
Lys Thr Asp Asn Gly Ile Val Trp Tyr Thr Trp His Gly Trp Trp Tyr		
305	310	315
Ser Leu Lys Ser Val Val Met Lys Ile Arg Pro Asn Asp Phe Ile Pro		
325	330	335
Asn Val Ile		

&lt;210&gt; 1083

&lt;211&gt; 256

1075

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1083

Lys Ser Leu Asn Gly Pro Ala Asp Phe Glu Lys Arg Val Glu Gly Gly  
 1 5 10 15

Gly Arg Pro Arg Ala Pro Leu Val Asn Ala Leu Leu Thr Ala Pro Glu  
 20 25 30

Phe Leu Ile Tyr Thr Gly Cys Met Val Cys Val Phe Leu Phe Cys Phe  
 35 40 45

Ser Pro Pro Ala Gly Leu Phe Xaa Gly Trp Gly Gly Gly Phe Ala Met  
 50 55 60

Ser Asp Asp Asp Ser Arg Ala Ser Thr Ser Ser Ser Ser Ser Ser  
 65 70 75 80

Ser Asn Gln Gln Thr Glu Lys Glu Thr Asn Thr Pro Lys Lys Lys Glu  
 85 90 95

Ser Lys Val Ser Met Ser Lys Asn Ser Lys Leu Leu Ser Thr Ser Ala  
 100 105 110

Lys Arg Ile Gln Lys Glu Leu Ala Asp Ile Thr Leu Asp Pro Pro Pro  
 115 120 125

Asn Cys Ser Ala Gly Pro Lys Gly Asp Asn Ile Tyr Glu Trp Arg Ser  
 130 135 140

Thr Ile Leu Gly Pro Pro Gly Ser Val Tyr Glu Gly Gly Val Phe Phe  
 145 150 155 160

Leu Asp Ile Thr Phe Thr Pro Glu Tyr Pro Phe Lys Pro Pro Lys Val  
 165 170 175

Thr Phe Arg Thr Arg Ile Tyr His Cys Asn Ile Asn Ser Gln Gly Val  
 180 185 190

Ile Cys Leu Asp Ile Leu Lys Asp Asn Trp Ser Pro Ala Leu Thr Ile  
 195 200 205

Ser Lys Val Leu Leu Ser Ile Cys Ser Leu Leu Thr Asp Cys Asn Pro  
 210 215 220

1076

Ala Asp Pro Leu Val Gly Ser Ile Ala Thr Gln Tyr Met Thr Asn Arg  
 225 230 235 240

Ala Glu His Asp Arg Met Ala Arg Gln Trp Thr Lys Arg Tyr Ala Thr  
 245 250 255

&lt;210&gt; 1084

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1084

Glu Lys Cys Val Ser Phe Ser Ala Val Leu Lys Ser Leu Ser Pro Val  
 1 5 10 15

Asp Pro Val Glu Pro Ile Ser Asn Ser Glu Pro Ser Met Asn Ser Asp  
 20 25 30

Met Gly Lys Val Ser Lys Asn Asp Thr Glu Glu Glu Ser Asn Lys Ser  
 35 40 45

Ala Thr Thr Asp Asn Glu Ile Ser Arg Thr Glu Tyr Leu Cys Glu Asn  
 50 55 60

Ser Leu Glu Gly Lys Asn Lys Asp Asn Ser Ser Asn Glu Val Phe Pro  
 65 70 75 80

Gln Gly Ala Glu Glu Arg Met Cys Tyr Gln Cys Glu Ser Glu Asp Glu  
 85 90 95

Pro Gln Ala Asp Gly Ser Gly Leu Thr Thr Ala Pro Pro Thr Pro Arg  
 100 105 110

Asp Ser Leu Gln Pro Ser Ile Lys Gln Arg Leu Ala Arg Leu Gln Leu  
 115 120 125

Ser Pro Asp Phe Thr Phe Thr Ala Gly Leu Ala Ala Glu Val Ala Ala  
 130 135 140

Arg Ser Leu Ser Phe Thr Thr Met Gln Glu Gln Thr Phe Gly Asp Glu  
 145 150 155 160

Glu Glu Glu Gln Ile Ile Glu Glu Asn Lys Asn Glu Ile Glu Glu Lys  
 165 170 175

1077

&lt;210&gt; 1085

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1085

His Arg Lys Ser Arg Pro Ala Asn His Cys Val Tyr Phe Tyr Gly Asp  
 1 5 10 15

Glu Ile Ser Phe Ser Cys His Glu Thr Ser Arg Phe Ser Ala Ile Cys  
 20 25 30

Gln Gly Asp Gly Thr Trp Ser Pro Arg Thr Pro Ser Cys Gly Asp Ile  
 35 40 45

Cys Asn Phe Pro Pro Lys Ile Ala His Gly His Tyr Lys Gln Ser Ser  
 50 55 60

Ser Tyr Ser Phe Phe Lys Glu Glu Ile Ile Tyr Glu Cys Asp Lys Gly  
 65 70 75 80

Tyr Ile Leu Val Gly Gln Ala Lys Leu Ser Cys Ser Tyr Ser His Trp  
 85 90 95

Ser Ala Pro Ala Pro Gln Cys Lys Ala Leu Cys Arg Lys Pro Glu Leu  
 100 105 110

Val Asn Gly Arg Leu Ser Val Asp Lys Asp Gln Tyr Val Glu Pro Glu  
 115 120 125

Asn Val Thr Ile Gln Cys Asp Ser Gly Tyr Gly Val Val Gly Pro Gln  
 130 135 140

Ser Ile Thr Cys Ser Gly Asn Arg Thr Trp Tyr Pro Glu Val Pro Lys  
 145 150 155 160

Cys Glu Trp Glu Thr Pro Glu Gly Cys Glu Gln Val Leu Thr Gly Lys  
 165 170 175

Arg Leu Met Gln Cys Leu Pro Asn Pro Glu Asp Val Lys Met Ala Leu  
 180 185 190

Glu Val Tyr Lys Leu Ser Leu Glu Ile Glu Gln Leu Glu Leu Gln Arg  
 195 200 205

Asp Ser Ala Arg Gln Ser Thr Leu Asp Lys Glu Leu  
 210 215 220

1078

&lt;210&gt; 1086

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1086

Val Lys Pro Ser Gly Gly Glu Gly Asp Val Ala Gln Arg Pro Arg Asp  
1 5 10 15  
Arg Leu Ser Ser Arg Leu Leu Gly Ser Pro Ala Trp Arg Arg Arg Leu  
20 25 30  
Met Thr Glu Gly Pro Leu Ala Gly Ala Pro Val Cys Ile Phe Glu Gly  
35 40 45  
Pro Gly Pro Pro Gly Gly Ala Gly Ser Tyr Ser Trp Gly Leu Gly Phe  
50 55 60  
Arg Arg Ala Gly Gly Gly Ala Gly Leu Lys Ala Ala Leu Val Tyr Gly  
65 70 75 80  
Val Val Thr Gln Ser His Trp Gln Arg Trp Gly Leu Ala Val Ala Trp  
85 90 95  
Gln Tyr Leu Gly Ile Ala Ser Thr Gly Asn Lys Asp Gly His Glu Gln  
100 105 110  
Ser Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
115 120 125  
Lys Lys Lys Lys Lys  
130

&lt;210&gt; 1087

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1087

Ile Leu Thr Tyr Lys Met Lys Gln Asp Ala Ser Arg Asn Ala Ala Tyr  
1 5 10 15  
Thr Val Asp Cys Glu Asp Tyr Val His Val Val Glu Phe Asn Pro Phe  
20 25 30  
Glu Asn Gly Asp Ser Gly Asn Leu Ile Ala Tyr Gly Gly Asn Asn Tyr



1079

35	40	45
Val Val Ile Gly Thr Cys Thr Phe Gln Glu Glu Glu Ala Asp Val Glu		
50	55	60
Gly Ile Gln Tyr Lys Thr Leu Arg Thr Phe His His Gly Val Arg Val		
65	70	75 80
Asp Gly Ile Ala Trp Ser Pro Glu Thr Arg Leu Asp Ser Leu Pro Pro		
	85	90 95
Val Ile Lys Phe Cys Thr Ser Ala Ala Asp Met Lys Ile Arg Leu Phe		
	100	105 110
Thr Ser Asp Leu Gln Asp Lys Asn Glu Tyr Lys Val Leu Glu Gly His		
	115	120 125
Thr Asp Phe Ile Asn Gly Leu Val Phe Asp Pro Lys Glu Gly Gln Glu		
	130	135 140
Ile Ala Ser Val Ser Asp Asp His Thr Cys Arg Ile Trp Asn Leu Glu		
145	150	155 160
Gly Val Gln Thr Ala His Phe Val Leu His Ser Pro Gly Met Ser Val		
	165	170 175
Cys Trp His Pro Glu Glu Thr Phe Lys Leu Met Val Ala Glu Lys Asn		
	180	185 190
Gly Thr Ile Arg Phe Tyr Asp Leu Leu Ala Gln Gln Ala Ile Leu Ser		
	195	200 205
Leu Glu Ser Glu Gln Val Pro Leu Met Ser Ala His Trp Cys Leu Lys		
	210	215 220
Asn Thr Phe Lys Val Gly Ala Val Ala Gly Asn Asp Trp Leu Ile Trp		
225	230	235 240
Asp Ile Thr Arg Ser Ser Tyr Pro Gln Asn Lys Arg Pro Val His Met		
	245	250 255
Asp Arg Ala Cys Leu Phe Arg Trp Ser Thr Ile Ser Glu Asn Leu Phe		
	260	265 270
Ala Thr Thr Gly Tyr Pro Gly Lys Met Gln Ala Ser Phe Lys Phe Ile		
	275	280 285
Ile		

1080

&lt;210&gt; 1088

&lt;211&gt; 836

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (677)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1088

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Pro Thr Arg Pro Asn Trp Thr Gly Met Thr Asn Leu Leu Asp Ile Pro
 1             5             10             15

Gly Leu Ser Ser Leu Ser Asp Thr Met Ile Met Asp Ser Ile Ala Ala
      20             25             30

Phe Leu Val Leu Pro Asn Arg Leu Leu Val Pro Leu Val Pro Asp Leu
      35             40             45

Gln Asp Val Ala Gln Leu Arg Ser Pro Leu Pro Arg Gly Ile Ile Arg
      50             55             60

Ile His Leu Leu Ala Ala Arg Gly Leu Ser Ser Lys Asp Lys Tyr Val
      65             70             75             80

Lys Gly Leu Ile Glu Gly Lys Ser Asp Pro Tyr Ala Leu Val Arg Leu
      85             90             95

Gly Thr Gln Thr Phe Cys Ser Arg Val Ile Asp Glu Glu Leu Asn Pro
      100            105            110

Gln Trp Gly Glu Thr Tyr Glu Val Met Val His Glu Val Pro Gly Gln
      115            120            125

Glu Ile Glu Val Glu Val Phe Asp Lys Asp Pro Asp Lys Asp Asp Phe
      130            135            140

Leu Gly Arg Met Lys Leu Asp Val Gly Lys Val Leu Gln Ala Ser Val
      145            150            155            160

Leu Asp Asp Trp Phe Pro Leu Gln Gly Gly Gln Gly Gln Val His Leu
      165            170            175

Arg Leu Glu Trp Leu Ser Leu Leu Ser Asp Ala Glu Lys Leu Glu Gln
      180            185            190

Val Leu Gln Trp Asn Trp Gly Val Ser Ser Arg Pro Asp Pro Pro Ser
      195            200            205

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1081

Ala Ala Ile Leu Val Val Tyr Leu Asp Arg Ala Gln Asp Leu Pro Leu  
210 215 220

Lys Lys Gly Asn Lys Glu Pro Asn Pro Met Val Gln Leu Ser Ile Gln  
225 230 235 240

Asp Val Thr Gln Glu Ser Lys Ala Val Tyr Ser Thr Asn Cys Pro Val  
245 250 255

Trp Glu Glu Ala Phe Arg Phe Phe Leu Gln Asp Pro Gln Ser Gln Glu  
260 265 270

Leu Asp Val Gln Val Lys Asp Asp Ser Arg Ala Leu Thr Leu Gly Ala  
275 280 285

Leu Thr Leu Pro Leu Ala Arg Leu Leu Thr Ala Pro Glu Leu Ile Leu  
290 295 300

Asp Gln Trp Phe Gln Leu Ser Ser Ser Gly Pro Asn Ser Arg Leu Tyr  
305 310 315 320

Met Lys Leu Val Met Arg Ile Leu Tyr Leu Asp Ser Ser Glu Ile Cys  
325 330 335

Phe Pro Thr Val Pro Gly Cys Pro Gly Ala Trp Asp Val Asp Ser Glu  
340 345 350

Asn Pro Gln Arg Gly Ser Ser Val Asp Ala Pro Pro Arg Pro Cys His  
355 360 365

Thr Thr Pro Asp Ser Gln Phe Gly Thr Glu His Val Leu Arg Ile His  
370 375 380

Val Leu Glu Ala Gln Asp Leu Ile Ala Lys Asp Arg Phe Leu Gly Gly  
385 390 395 400

Leu Val Lys Gly Lys Ser Asp Pro Tyr Val Lys Leu Lys Leu Ala Gly  
405 410 415

Arg Ser Phe Arg Ser His Val Val Arg Glu Asp Leu Asn Pro Arg Trp  
420 425 430

Asn Glu Val Phe Glu Val Ile Val Thr Ser Val Pro Gly Gln Glu Leu  
435 440 445

Glu Val Glu Val Phe Asp Lys Asp Leu Asp Lys Asp Asp Phe Leu Gly  
450 455 460

Arg Cys Lys Val Arg Leu Thr Thr Val Leu Asn Ser Gly Phe Leu Asp  
465 470 475 480

1082

Glu Trp Leu Thr Leu Glu Asp Val Pro Ser Gly Arg Leu His Leu Arg  
 485 490 495  
 Leu Glu Arg Leu Thr Pro Arg Pro Thr Ala Ala Glu Leu Glu Glu Val  
 500 505 510  
 Leu Gln Val Asn Ser Leu Ile Gln Thr Gln Lys Ser Ala Glu Leu Ala  
 515 520 525  
 Ala Ala Leu Leu Ser Ile Tyr Met Glu Arg Ala Glu Asp Leu Pro Leu  
 530 535 540  
 Arg Lys Gly Thr Lys His Leu Ser Pro Tyr Ala Thr Leu Thr Val Gly  
 545 550 555 560  
 Asp Ser Ser His Lys Thr Lys Thr Ile Ser Gln Thr Ser Ala Pro Val  
 565 570 575  
 Trp Asp Glu Ser Ala Ser Phe Leu Ile Arg Lys Pro His Thr Glu Ser  
 580 585 590  
 Leu Glu Leu Gln Val Arg Gly Glu Gly Thr Gly Val Leu Gly Ser Leu  
 595 600 605  
 Ser Leu Pro Leu Ser Glu Leu Leu Val Ala Asp Gln Leu Cys Leu Asp  
 610 615 620  
 Arg Trp Phe Thr Leu Ser Ser Gly Gln Gly Gln Val Leu Leu Arg Ala  
 625 630 635 640  
 Gln Leu Gly Ile Leu Val Ser Gln His Ser Gly Val Glu Ala His Ser  
 645 650 655  
 His Ser Tyr Ser His Ser Ser Ser Ser Leu Ser Glu Glu Pro Glu Leu  
 660 665 670  
 Ser Gly Gly Pro Xaa His Ile Thr Ser Ser Ala Pro Glu Leu Arg Gln  
 675 680 685  
 Arg Leu Thr His Val Asp Ser Pro Leu Glu Ala Pro Ala Gly Pro Leu  
 690 695 700  
 Gly Gln Val Lys Leu Thr Leu Trp Tyr Tyr Ser Glu Glu Arg Lys Leu  
 705 710 715 720  
 Val Ser Ile Val His Gly Cys Arg Ser Leu Arg Gln Asn Gly Arg Asp  
 725 730 735  
 Pro Pro Asp Pro Tyr Val Ser Leu Leu Leu Leu Pro Asp Lys Asn Arg  
 740 745 750

1083

Gly Thr Lys Arg Arg Thr Ser Gln Lys Lys Arg Thr Leu Ser Pro Glu  
 755 760 765

Phe Asn Glu Arg Phe Glu Trp Glu Leu Pro Leu Asp Glu Ala Gln Arg  
 770 775 780

Arg Lys Leu Asp Val Ser Val Lys Ser Asn Ser Ser Phe Met Ser Arg  
 785 790 795 800

Glu Arg Glu Leu Leu Gly Lys Val Gln Leu Asp Leu Ala Glu Thr Asp  
 805 810 815

Leu Ser Gln Gly Val Ala Arg Trp Tyr Asp Leu Met Asp Asn Lys Asp  
 820 825 830

Lys Gly Ser Ser  
 835

<210> 1089

<211> 409

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (65)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (393)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (406)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1089

Arg Ser Ser Val Ala Ser Val His Thr Trp Arg Gln Arg Arg Gln Val  
 1 5 10 15

Xaa Val Phe Val Leu Pro Ser Thr Ala Asn Met Lys Arg Pro Lys Leu  
 20 25 30

1084

Lys Lys Ala Ser Lys Arg Met Thr Cys His Lys Arg Tyr Lys Ile Gln  
 35 40 45  
 Lys Lys Val Arg Glu His His Arg Lys Leu Arg Lys Glu Ala Lys Lys  
 50 55 60  
 Xaa Gly His Lys Lys Pro Arg Lys Asp Pro Gly Val Pro Asn Ser Ala  
 65 70 75 80  
 Pro Phe Lys Glu Ala Leu Leu Arg Glu Ala Glu Leu Arg Lys Gln Arg  
 85 90 95  
 Leu Glu Glu Leu Lys Gln Gln Gln Lys Leu Asp Arg Gln Lys Glu Leu  
 100 105 110  
 Glu Lys Lys Arg Lys Leu Glu Thr Asn Pro Asp Ile Lys Pro Ser Asn  
 115 120 125  
 Val Glu Pro Met Glu Lys Glu Phe Gly Leu Cys Lys Thr Glu Asn Lys  
 130 135 140  
 Ala Lys Ser Gly Lys Gln Asn Ser Lys Lys Leu Tyr Cys Gln Glu Leu  
 145 150 155 160  
 Lys Lys Val Ile Glu Ala Ser Asp Val Val Leu Glu Val Leu Asp Ala  
 165 170 175  
 Arg Asp Pro Leu Gly Cys Arg Cys Pro Gln Val Glu Glu Ala Ile Val  
 180 185 190  
 Gln Ser Gly Gln Lys Lys Leu Val Leu Ile Leu Asn Lys Ser Asp Leu  
 195 200 205  
 Val Pro Lys Glu Asn Leu Glu Ser Trp Leu Asn Tyr Leu Lys Lys Glu  
 210 215 220  
 Leu Pro Thr Val Val Phe Arg Ala Ser Thr Lys Pro Lys Asp Lys Gly  
 225 230 235 240  
 Lys Ile Thr Lys Arg Val Lys Ala Lys Lys Asn Ala Ala Pro Phe Arg  
 245 250 255  
 Ser Glu Val Cys Phe Gly Lys Glu Gly Leu Trp Lys Leu Leu Gly Gly  
 260 265 270  
 Phe Gln Glu Thr Cys Ser Lys Ala Ile Arg Val Gly Val Ile Gly Phe  
 275 280 285  
 Pro Asn Val Gly Lys Ser Ser Ile Ile Asn Ser Leu Lys Gln Glu Gln  
 290 295 300

1085

Met Cys Asn Val Gly Val Ser Met Gly Leu Thr Arg Ser Met Gln Val  
 305 310 315 320

Val Pro Leu Asp Lys Gln Ile Thr Ile Ile Asp Ser Pro Ser Phe Ile  
 325 330 335

Val Ser Pro Leu Asn Ser Ser Ser Ala Leu Ala Leu Arg Ser Pro Ala  
 340 345 350

Ser Ile Glu Val Val Lys Pro Met Glu Ala Ala Ser Ala Ile Leu Ser  
 355 360 365

Gln Ala Asp Ala Arg Gln Val Val Leu Lys Tyr Thr Val Pro Gly Tyr  
 370 375 380

Arg Asn Ser Leu Gly Ile Phe Tyr Xaa Ala Cys Ser Glu Lys Arg Tyr  
 385 390 395 400

Ala Pro Lys Arg Trp Xaa Pro Lys Cys  
 405

<210> 1090

<211> 161

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1090

Pro Lys Asn Trp Xaa Thr Ala Arg Ala Asp His His Ala Ser Met Asn  
 1 5 10 15

Trp Val Pro Cys Gly His Ser Tyr Phe Gly Ala Thr Leu Asn Ser Phe  
 20 25 30

Ile His Val Leu Met Tyr Ser Tyr Tyr Gly Leu Ser Ser Val Pro Ser  
 35 40 45

Met Arg Pro Tyr Leu Trp Trp Xaa Glu Val His His Ser Gly Ala Ala  
 50 55 60

1086

Ala Ser Val Cys Ala Asp Asn His Pro Asp Gln Leu Arg Gly His Leu  
 65 70 75 80  
 Ala Val His Ile Pro Ser Trp Leu Val Val Phe Pro Asp Trp Ile His  
 85 90 95  
 Asp Phe Pro Asp Cys Ser Leu His Lys Leu Leu His Ser Asp Leu Gln  
 100 105 110  
 Gln Glu Arg Gly Leu Pro Lys Glu Arg Pro Pro Glu Gly Pro Pro Glu  
 115 120 125  
 Trp Val His Gly Cys Cys Glu Trp Thr His Gln Gln Leu Phe Thr Pro  
 130 135 140  
 Gly Lys Gln Cys Glu Ala Lys Glu Ala Ala Glu Gly Leu Lys Ser Lys  
 145 150 155 160  
 Asn

&lt;210&gt; 1091

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1091

Ser Lys Asn Ser Ala Arg Glu Glu Met Ala Ala Ser Ser Ser Ser Ser  
 1 5 10 15  
 Ser Ala Gly Gly Val Ser Gly Ser Ser Val Thr Gly Ser Gly Phe Ser  
 20 25 30  
 Val Ser Asp Leu Ala Pro Pro Arg Lys Ala Leu Phe Thr Tyr Pro Lys  
 35 40 45  
 Gly Ala Gly Glu Met Leu Glu Asp Gly Ser Glu Arg Phe Leu Cys Glu  
 50 55 60  
 Ser Val Phe Ser Tyr Gln Val Ala Ser Thr Leu Lys Gln Val Lys His  
 65 70 75 80  
 Asp Gln Gln Val Ala Arg Met Glu Lys Leu Ala Gly Leu Val Glu Glu  
 85 90 95  
 Leu Glu Ala Asp Glu Trp Arg Phe Lys Pro Ile Glu Gln Leu Leu Gly  
 100 105 110



1087

Phe Thr Pro Ser Ser Gly  
115

&lt;210&gt; 1092

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1092

Ala Pro Phe Leu Ala Ala Gly Val Ser Met Gly Gly Met Leu Leu Leu  
1 5 10 15

Asn Tyr Leu Gly Lys Ile Gly Ser Lys Thr Pro Leu Met Ala Ala Ala  
20 25 30

Thr Phe Ser Val Gly Trp Asn Thr Phe Ala Cys Ser Glu Ser Leu Glu  
35 40 45

Lys Pro Leu Asn Trp Leu Leu Phe Asn Tyr Tyr Leu Thr Thr Cys Leu  
50 55 60

Gln Ser Ser Val Asn Lys His Arg His Met Phe Val Lys Gln Val Asp  
65 70 75 80

Met Asp His Val Met Lys Ala Lys Ser Ile Arg Glu Phe Asp Lys Arg  
85 90 95

Phe Thr Ser Val Met Phe Gly Tyr Gln Thr Ile Asp Asp Tyr Tyr Thr  
100 105 110

Asp Ala Ser Pro Ser Pro Arg Leu Lys Ser Val Gly Ile Pro Val Leu  
115 120 125

Cys Leu Asn Ser Val Asp Asp Val Phe Ser Pro Ser His Ala Ile Pro  
130 135 140

Ile Glu Thr Ala Lys Gln Asn Pro Asn Val Ala Leu Val Leu Thr Ser  
145 150 155 160

Tyr Gly Gly His Ile Gly Phe Leu Glu Gly Ile Trp Pro Arg Gln Ser  
165 170 175

Thr Tyr Met Asp Arg Val Phe Lys Gln Phe Val Gln Ala Met Val Glu  
180 185 190

His Gly His Glu Leu Ser  
195

1088

&lt;210&gt; 1093

&lt;211&gt; 36

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1093

Pro Gly Trp Ser Arg Ser Pro Gly Trp Ser Arg Ser Pro Gly Trp Ser  
1 5 10 15

Arg Ser Pro Asp Val Val Ile His Pro Pro Arg Pro Pro Lys Met Leu  
20 25 30

Gly Leu Gln Val  
35

&lt;210&gt; 1094

&lt;211&gt; 615

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (113)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (132)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (155)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (156)

1089

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (157)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1094

Tyr	Xaa	Gln	Leu	Val	Leu	Leu	Gln	Val	Pro	Val	Arg	Ile	Pro	Gly	Ser
1				5					10					15	
Thr	His	Ala	Ser	Xaa	Asp	Ala	Trp	Val	Ala	Arg	Gln	Leu	Ala	Lys	Pro
			20					25					30		
Asp	Asn	Thr	Leu	Phe	Val	Asn	Arg	Thr	Leu	Phe	Asp	Gln	Val	Leu	Glu
	35						40					45			
Phe	Leu	Cys	Ser	Pro	Asp	Asp	Asp	Ser	Arg	His	Ser	Glu	Arg	Gln	Gln
	50					55					60				
Val	Leu	Leu	Glu	Leu	Leu	Gln	Ala	Gly	Gly	Ile	Val	Gln	Phe	Glu	Glu
	65				70					75				80	
Ser	Arg	Leu	Ile	Arg	Met	Ala	Glu	Lys	Ala	Glu	Phe	Tyr	Gln	Ile	Cys
			85					90						95	
Glu	Phe	Met	Tyr	Glu	Arg	Glu	His	Gln	Tyr	Asp	Lys	Ile	Ile	Asp	Cys
		100						105					110		
Xaa	Leu	Arg	Asp	Pro	Leu	Arg	Glu	Glu	Glu	Val	Phe	Asn	Tyr	Ile	His
	115						120					125			
Asn	Ile	Leu	Xaa	Ile	Pro	Gly	His	Ser	Ala	Glu	Glu	Lys	Gln	Ser	Val
	130					135						140			
Trp	Gln	Lys	Ala	Met	Asp	His	Ile	Glu	Glu	Xaa	Xaa	Xaa	Leu	Lys	Pro
145				150						155				160	
Cys	Lys	Ala	Ala	Glu	Leu	Val	Ala	Thr	His	Phe	Ser	Gly	His	Ile	Glu
			165					170					175		
Thr	Val	Ile	Lys	Lys	Leu	Gln	Asn	Gln	Val	Leu	Leu	Phe	Lys	Phe	Leu
		180						185					190		
Arg	Ser	Leu	Leu	Asp	Pro	Arg	Glu	Gly	Ile	His	Val	Asn	Gln	Glu	Leu
	195						200						205		
Leu	Gln	Ile	Ser	Pro	Cys	Ile	Thr	Glu	Gln	Phe	Ile	Glu	Leu	Leu	Cys
	210					215					220				
Gln	Phe	Asn	Pro	Thr	Gln	Val	Ile	Glu	Thr	Leu	Gln	Val	Leu	Glu	Cys

1090

225		230		235		240
Tyr Arg Leu Glu	Glu Thr Ile Gln Ile Thr Gln Lys Tyr Gln Leu His					
	245		250		255	
Glu Val Thr Ala Tyr Leu Leu Glu Lys Lys Gly Asp Ile His Gly Ala						
	260		265		270	
Phe Leu Ile Met Leu Glu Arg Leu Gln Ser Lys Leu Gln Glu Val Thr						
	275		280		285	
His Gln Gly Glu Asn Thr Lys Glu Asp Pro Ser Leu Lys Asp Val Glu						
	290		295		300	
Asp Thr Met Val Glu Thr Ile Ala Leu Cys Gln Arg Asn Ser His Asn						
	305		310		315	320
Leu Asn Gln Gln Gln Arg Glu Ala Leu Trp Phe Pro Leu Leu Glu Ala						
		325		330		335
Met Met Ala Pro Gln Lys Leu Ser Ser Ser Ala Ile Pro His Leu His						
	340		345		350	
Ser Glu Ala Leu Lys Ser Leu Thr Met Gln Val Leu Asn Ser Met Ala						
	355		360		365	
Ala Phe Ile Ala Leu Pro Ser Ile Leu Gln Arg Ile Leu Gln Asp Pro						
	370		375		380	
Val Tyr Gly Lys Gly Lys Leu Gly Glu Ile Gln Gly Leu Ile Leu Gly						
	385		390		395	400
Met Leu Asp Thr Phe Asn Tyr Glu Gln Thr Leu Leu Glu Thr Thr Thr						
	405		410		415	
Ser Leu Leu Asn Gln Asp Leu His Trp Ser Leu Cys Asn Leu Arg Ala						
	420		425		430	
Ser Val Thr Arg Gly Leu Asn Pro Lys Gln Asp Tyr Cys Ser Ile Cys						
	435		440		445	
Leu Gln Gln Tyr Lys Arg Arg Gln Glu Met Ala Asp Glu Ile Ile Val						
	450		455		460	
Phe Ser Cys Gly His Leu Tyr His Ser Phe Cys Leu Gln Asn Lys Glu						
	465		470		475	480
Cys Thr Val Glu Phe Glu Gly Gln Thr Arg Trp Thr Cys Tyr Lys Cys						
	485		490		495	
Ser Ser Ser Asn Lys Val Gly Lys Leu Ser Glu Asn Ser Ser Glu Ile						

1091

500	505	510
Lys Lys Gly Arg Ile Thr Pro Ser Gln Val Lys Met Ser Pro Ser Tyr		
515	520	525
His Gln Ser Lys Gly Asp Pro Thr Ala Lys Lys Gly Thr Ser Glu Pro		
530	535	540
Val Leu Asp Pro Gln Gln Ile Gln Ala Phe Asp Gln Leu Cys Arg Leu		
545	550	555
Tyr Arg Gly Ser Ser Arg Leu Ala Leu Leu Thr Glu Leu Ser Gln Asn		
565	570	575
Arg Ser Ser Glu Ser Tyr Arg Pro Phe Ser Gly Ser Gln Ser Ala Pro		
580	585	590
Ala Phe Asn Ser Ile Phe Gln Asn Glu Asn Phe Gln Leu Gln Leu Ile		
595	600	605
Pro Pro Pro Val Thr Glu Asp		
610	615	

&lt;210&gt; 1095

&lt;211&gt; 264

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1095

Trp Xaa Ser Thr Thr Ile Trp Lys Ala Gly Pro Pro Ala Gly Thr Gly
1                      5                      10                      15

Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Xaa Thr Arg Gly Phe Trp
20                      25                      30

Phe Cys Ser Ser Val Trp Val Ser Ser Arg Leu Leu Lys Met Asn Arg
35                      40                      45

Leu Phe Gly Lys Ala Lys Pro Lys Ala Pro Pro Pro Ser Leu Thr Asp

1092

50                      55                      60  
 Cys Ile Gly Thr Val Asp Ser Arg Ala Glu Ser Ile Asp Lys Lys Ile  
 65                      70                      75                      80  
 Ser Arg Leu Asp Ala Glu Leu Val Lys Tyr Lys Asp Gln Ile Lys Lys  
 85                      90                      95  
 Met Arg Glu Gly Pro Ala Lys Asn Met Val Lys Gln Lys Ala Leu Arg  
 100                      105                      110  
 Val Leu Lys Gln Lys Arg Met Tyr Glu Gln Gln Arg Asp Asn Leu Ala  
 115                      120                      125  
 Gln Gln Ser Phe Asn Met Glu Gln Ala Asn Tyr Thr Ile Gln Ser Leu  
 130                      135                      140  
 Lys Asp Thr Lys Thr Thr Val Asp Ala Met Lys Leu Gly Val Lys Glu  
 145                      150                      155                      160  
 Met Lys Lys Ala Tyr Lys Gln Val Lys Ile Asp Gln Ile Glu Asp Leu  
 165                      170                      175  
 Gln Asp Gln Leu Glu Asp Met Met Glu Asp Ala Asn Glu Ile Gln Glu  
 180                      185                      190  
 Ala Leu Ser Arg Ser Tyr Gly Thr Pro Glu Leu Asp Glu Asp Asp Leu  
 195                      200                      205  
 Glu Ala Glu Leu Asp Ala Leu Gly Asp Glu Leu Leu Ala Asp Glu Asp  
 210                      215                      220  
 Ser Ser Tyr Leu Asp Glu Ala Ala Ser Ala Pro Ala Ile Pro Glu Gly  
 225                      230                      235                      240  
 Val Pro Thr Asp Thr Lys Asn Lys Asp Gly Val Leu Val Asp Glu Phe  
 245                      250                      255  
 Gly Leu Pro Gln Ile Pro Ala Ser  
 260

&lt;210&gt; 1096

&lt;211&gt; 244

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1096

Ser Cys Cys Phe Leu Lys Arg Leu Gln Ala Ser Phe Pro Arg Thr Ala  
 1                      5                      10                      15

1093

Val Ser Phe Glu Pro Leu Ala Gly Asp Met Pro Arg Gly Arg Lys Ser  
 20 25 30  
 Arg Arg Arg Arg Asn Ala Arg Ala Ala Glu Glu Asn Arg Asn Asn Arg  
 35 40 45  
 Lys Ile Gln Ala Ser Glu Ala Ser Glu Thr Pro Met Ala Ala Ser Val  
 50 55 60  
 Val Ala Ser Thr Pro Glu Asp Asp Leu Ser Gly Pro Glu Glu Asp Pro  
 65 70 75 80  
 Ser Thr Pro Glu Glu Ala Ser Thr Thr Pro Glu Glu Ala Ser Ser Thr  
 85 90 95  
 Ala Gln Ala Gln Lys Pro Ser Val Pro Arg Ser Asn Phe Gln Gly Thr  
 100 105 110  
 Lys Lys Ser Leu Leu Met Ser Ile Leu Ala Leu Ile Phe Ile Met Gly  
 115 120 125  
 Asn Ser Ala Lys Glu Ala Leu Val Trp Lys Val Leu Gly Lys Leu Gly  
 130 135 140  
 Met Gln Pro Gly Arg Gln His Ser Ile Phe Gly Asp Pro Lys Lys Ile  
 145 150 155 160  
 Val Thr Glu Glu Phe Val Arg Arg Gly Tyr Leu Ile Tyr Lys Pro Val  
 165 170 175  
 Pro Arg Ser Ser Pro Val Glu Tyr Glu Phe Phe Trp Gly Pro Arg Ala  
 180 185 190  
 His Val Glu Ser Ser Lys Leu Lys Val Met His Phe Val Ala Arg Val  
 195 200 205  
 Arg Asn Arg Cys Ser Lys Asp Trp Pro Cys Asn Tyr Asp Trp Asp Ser  
 210 215 220  
 Asp Asp Asp Ala Glu Val Glu Ala Ile Leu Asn Ser Gly Ala Arg Gly  
 225 230 235 240  
 Tyr Ser Ala Pro

&lt;210&gt; 1097

&lt;211&gt; 132

&lt;212&gt; PRT

1094

&lt;213&gt; Homo sapiens

&lt;400&gt; 1097

Ala Thr Met Val Arg Met Asn Val Leu Ala Asp Ala Leu Lys Ser Ile  
 1 5 10 15  
 Asn Asn Ala Glu Lys Arg Gly Lys Arg Gln Val Leu Ile Arg Pro Cys  
 20 25 30  
 Ser Lys Val Ile Val Arg Phe Leu Thr Val Met Met Lys His Gly Tyr  
 35 40 45  
 Ile Gly Glu Phe Glu Ile Ile Asp Asp His Arg Ala Gly Lys Ile Val  
 50 55 60  
 Val Asn Leu Thr Gly Arg Leu Asn Lys Cys Gly Val Ile Ser Pro Arg  
 65 70 75 80  
 Phe Asp Val Gln Leu Lys Asp Leu Glu Lys Trp Gln Asn Asn Leu Leu  
 85 90 95  
 Pro Ser Arg Gln Phe Gly Phe Ile Val Leu Thr Thr Ser Ala Gly Ile  
 100 105 110  
 Met Asp His Glu Glu Ala Arg Arg Lys His Thr Gly Gly Lys Ile Leu  
 115 120 125  
 Gly Phe Phe Phe  
 130

&lt;210&gt; 1098

&lt;211&gt; 371

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (186)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1098

Ala Arg His Thr Pro Ala Gln Arg His Asp His Pro Gln Glu Gly Asn  
 1 5 10 15



1095

Ile Pro Val Cys Val Gln Leu Ala Val Cys Ala Leu Pro Leu Pro Val  
 20 25 30

Val Pro Gly Pro Glu His Cys Gly Pro Gln Arg Xaa Leu Gln Pro Leu  
 35 40 45

Val Tyr Pro Leu Ala Gln Val Ile Ile Gly Cys Ile Lys Leu Ile Pro  
 50 55 60

Thr Ala Arg Phe Tyr Pro Leu Arg Met His Cys Ile Arg Ala Leu Thr  
 65 70 75 80

Leu Leu Ser Gly Ser Ser Gly Ala Phe Ile Pro Val Leu Pro Phe Ile  
 85 90 95

Leu Glu Met Phe Gln Gln Val Asp Phe Asn Arg Lys Pro Gly Arg Met  
 100 105 110

Ser Ser Lys Pro Ile Asn Phe Ser Val Ile Leu Lys Leu Ser Asn Val  
 115 120 125

Asn Leu Gln Glu Lys Ala Tyr Arg Asp Gly Leu Val Glu Gln Leu Tyr  
 130 135 140

Asp Leu Thr Leu Glu Tyr Leu His Ser Gln Ala His Cys Ile Gly Phe  
 145 150 155 160

Pro Glu Leu Val Leu Pro Val Val Leu Gln Leu Lys Ser Phe Leu Arg  
 165 170 175

Glu Cys Lys Val Ala Asn Tyr Cys Arg Xaa Val Gln Gln Leu Leu Gly  
 180 185 190

Lys Val Gln Glu Asn Ser Ala Tyr Ile Cys Ser Arg Arg Gln Arg Val  
 195 200 205

Ser Phe Gly Val Ser Glu Gln Gln Ala Val Glu Ala Trp Glu Lys Leu  
 210 215 220

Thr Arg Glu Glu Gly Thr Pro Leu Thr Leu Tyr Tyr Ser His Trp Arg  
 225 230 235 240

Lys Leu Arg Asp Arg Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg  
 245 250 255

Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys Met Ala Asp  
 260 265 270

Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe Asp Leu Asn  
 275 280 285

1096

Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Ser Glu Arg Gly Ile Leu  
290 295 300

Arg Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu Glu Asp Glu  
305 310 315 320

Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu Trp Ser Trp  
325 330 335

Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly Glu Leu Gln  
340 345 350

Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu Gln Leu Ser  
355 360 365

Glu Asp Asp  
370

&lt;210&gt; 1099

&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1099

Glu Arg Thr Leu Gly Gln Pro Gly Phe Leu Gly Cys Pro Arg Gln Pro  
1 5 10 15

His Thr Ala Met His Tyr Pro Thr Ala Leu Leu Phe Leu Ile Leu Ala  
20 25 30

Asn Gly Ala Gln Ala Phe Arg Ile Cys Ala Phe Asn Ala Gln Arg Leu  
35 40 45

Thr Leu Ala Lys Val Ala Arg Glu Gln Val Met Asp Thr Leu Val Arg  
50 55 60

Ile Leu Ala Arg Cys Asp Ile Met Val Leu Gln Glu Val Val Asp Ser  
65 70 75 80

Ser Gly Ser Ala Ile Pro Leu Leu Leu Arg Glu Leu Asn Arg Phe Asp  
85 90 95

Gly Ser Gly Pro Tyr Ser Thr Leu Ser Ser Pro Gln Leu Gly Arg Ser  
100 105 110

Thr Tyr Met Glu Thr Tyr Val Tyr Phe Tyr Arg Ser His Lys Thr Gln  
115 120 125

Val Leu Ser Ser Tyr Val Tyr Asn Asp Glu Asp Asp Val Phe Ala Arg

1097

130	135	140
Glu Pro Phe Val Ala Gln Phe Ser Leu Pro Ser Asn Val Leu Pro Ser		
145	150	155 160
Leu Val Leu Val Pro Leu His Thr Thr Pro Lys Ala Val Glu Lys Glu		
	165	170 175
Leu Asn Ala Leu Tyr Asp Val Phe Leu Glu Val Ser Gln His Trp Gln		
	180	185 190
Ser Lys Asp Val Ile Leu Leu Gly Asp Phe Asn Ala Asp Cys Ala Ser		
	195	200 205
Leu Thr Lys Lys Arg Leu Asp Lys Leu Glu Leu Arg Thr Glu Pro Gly		
	210	215 220
Phe His Trp Val Ile Ala Asp Gly Glu Asp Thr Thr Val Arg Ala Ser		
	225	230 235 240
Thr His Cys Thr Tyr Asp Arg Val Val Leu His Gly Glu Arg Cys Arg		
	245	250 255
Ser Leu Leu His Thr Ala Ala Ala Phe Asp Phe Pro Thr Ser Phe Gln		
	260	265 270
Leu Thr Glu Glu Glu Ala Leu Asn Ile Ser Asp His Tyr Pro Val Glu		
	275	280 285
Val Glu Leu Lys Leu Ser Gln Ala His Ser Val Gln Pro Leu Ser Leu		
	290	295 300
Thr Val Leu Leu Leu Leu Ser Leu Leu Ser Pro Gln Leu Cys Pro Ala		
	305	310 315 320
Ala		

<210> 1100  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 1100  
 Leu Leu Leu Cys Val Phe Tyr Ile Ala Cys Phe Cys Lys Asn Met Leu  
 1 5 10 15  
 Gly Asp Glu Arg Leu Val Leu Glu Arg Lys Cys Ser Ser Val Gln Arg  
 20 25 30

1098

Met His Phe Leu Pro Leu Ile Leu Glu Lys Thr Phe Thr Val Ile Tyr  
                   35                                  40                                  45

Met Val Phe Cys Lys Arg Thr Ile Asn Arg Thr Phe  
                   50                                  55                                  60

&lt;210&gt; 1101

&lt;211&gt; 254

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (162)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (170)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1101

Phe Gly Thr Ser Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr  
           1                                  5                                  10                                  15

Gly Glu Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu  
                   20                                  25                                  30

Leu Pro Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser  
                   35                                  40                                  45

Phe Lys Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ser Ile  
           50                                  55                                  60

Leu Ala Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu  
           65                                  70                                  75                                  80

Leu Ser Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys  
                   85                                  90                                  95

Val Leu Arg Lys Ile Glu Lys Pro Phe Gly Leu Tyr Pro Asn Phe Leu  
                   100                                  105                                  110

Ser Pro Val Ser Gly Asn Trp Val Gln His His Val Ser Val Gly Gly  
           115                                  120                                  125

Leu Gly Asp Ser Phe Tyr Glu Tyr Leu Ile Lys Ser Trp Leu Met Ser  
           130                                  135                                  140

1099

Gly Lys Thr Asp Met Glu Ala Lys Asn Met Tyr Tyr Glu Ala Leu Glu  
145 150 155 160

Ala Xaa Arg Asp Leu Leu Ala Glu Cys Xaa Ser Arg Gly Ala Asp Leu  
165 170 175

His Cys Arg Val Ala Arg Gly Asp Ser Gly Pro Gln Asp Gly Ala Pro  
180 185 190

Gly Leu Phe Leu Arg Gly His Asp Arg Pro Trp Pro Glu Asp Ala Lys  
195 200 205

Glu Glu Lys Arg Ala His Tyr Arg Glu Leu Ala Ala Gln Ile Thr Lys  
210 215 220

Thr Cys His Glu Ser Tyr Ala Arg Ser Asp Thr Lys Leu Gly Pro Glu  
225 230 235 240

Ala Ser Gly Leu Thr Pro Ala Glu Arg Pro Trp Pro Pro Ser  
245 250

<210> 1102

<211> 233

<212> PRT

<213> Homo sapiens

<400> 1102

Gly Pro Gly Trp Tyr Pro Ala Pro Leu Arg Leu Phe His Ser Asp Pro  
1 5 10 15

Trp Gly His Ala Gln Pro Gly Ala Lys Arg His Arg Ile Pro Glu Pro  
20 25 30

Glu Ala Ala Val Leu Phe Arg Gln Met Ala Thr Ala Leu Ala His Cys  
35 40 45

His Gln His Gly Leu Val Leu Arg Asp Leu Lys Leu Cys Arg Phe Val  
50 55 60

Phe Ala Asp Arg Glu Arg Lys Lys Leu Val Leu Glu Asn Leu Glu Asp  
65 70 75 80

Ser Cys Val Leu Thr Gly Pro Asp Asp Ser Leu Trp Asp Lys His Ala  
85 90 95

Cys Pro Ala Tyr Val Gly Pro Glu Ile Leu Ser Ser Arg Ala Ser Tyr  
100 105 110

1100

Ser Gly Lys Ala Ala Asp Val Trp Ser Leu Gly Val Ala Leu Phe Thr  
 115 120 125

Met Leu Ala Gly His Tyr Pro Phe Gln Asp Ser Glu Pro Val Leu Leu  
 130 135 140

Phe Gly Lys Ile Arg Arg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser  
 145 150 155 160

Ala Pro Ala Arg Cys Leu Val Arg Cys Leu Leu Arg Arg Glu Pro Ala  
 165 170 175

Glu Arg Leu Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln  
 180 185 190

Asp Pro Met Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala  
 195 200 205

Gln Val Val Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu  
 210 215 220

Gly Asp Arg Glu Val Val Leu Tyr Gly  
 225 230

&lt;210&gt; 1103

&lt;211&gt; 330

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1103

Cys Gln Leu Arg Ser Ala Ala Gly Val Pro Ser Ser Val Ser Val Ser  
 1 5 10 15

Pro Arg Asp Pro Ile Ala Met Glu Leu Ser Asp Ala Asn Leu Gln Thr  
 20 25 30

Leu Thr Glu Tyr Leu Lys Lys Thr Leu Asp Pro Asp Pro Ala Ile Arg  
 35 40 45

Arg Pro Ala Glu Lys Phe Leu Glu Ser Val Glu Gly Asn Gln Asn Tyr  
 50 55 60

Pro Leu Leu Leu Leu Thr Leu Leu Glu Lys Ser Gln Asp Asn Val Ile  
 65 70 75 80

Lys Val Cys Ala Ser Val Thr Phe Lys Asn Tyr Ile Lys Arg Asn Trp  
 85 90 95

Arg Ile Val Glu Asp Glu Pro Asn Lys Ile Cys Glu Ala Asp Arg Val

1101

100	105	110
Ala Ile Lys Ala Asn Ile Val His Leu Met Leu Ser Ser Pro Glu Gln 115	120	125
Ile Gln Lys Gln Leu Ser Asp Ala Ile Ser Ile Ile Gly Arg Glu Asp 130	135	140
Phe Pro Gln Lys Trp Pro Asp Leu Leu Thr Glu Met Val Asn Arg Phe 145	150	155 160
Gln Ser Gly Asp Phe His Val Ile Asn Gly Val Leu Arg Thr Ala His 165	170	175
Ser Leu Phe Lys Arg Tyr Arg His Glu Phe Lys Ser Asn Glu Leu Trp 180	185	190
Thr Glu Ile Lys Leu Val Leu Asp Ala Phe Ala Leu Pro Leu Thr Asn 195	200	205
Leu Phe Lys Ala Thr Ile Glu Leu Cys Ser Thr His Ala Asn Asp Ala 210	215	220
Ser Ala Leu Arg Ile Leu Phe Ser Ser Leu Ile Leu Ile Ser Lys Leu 225	230	235 240
Phe Tyr Ser Leu Asn Phe Gln Asp Leu Pro Glu Phe Phe Glu Asp Asn 245	250	255
Met Glu Thr Trp Met Asn Asn Phe His Thr Leu Leu Thr Leu Asp Asn 260	265	270
Lys Leu Leu Gln Thr Asp Asp Glu Glu Glu Ala Gly Leu Leu Glu Leu 275	280	285
Leu Lys Ser Gln Ile Cys Asp Asn Ala Ala Leu Tyr Ala Gln Lys Tyr 290	295	300
Asp Glu Glu Phe Gln Arg Tyr Leu Pro Arg Phe Val Thr Ala Ile Trp 305	310	315 320
Glu Phe Thr Ser Tyr Asn Gly Ser Arg Gly 325	330	

&lt;210&gt; 1104

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

1102

<220>  
 <221> SITE  
 <222> (9)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (150)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (167)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (171)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (175)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (177)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (180)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1104  
 Gly Thr Ser Pro Gly Arg Gly Gly Xaa Gly Val Gly Leu Arg Gly Leu  
 1 5 10 15  
 Ser Ser Leu Gln Ala Pro Gln Pro Ser Arg Val Pro Trp Pro Met Ala  
 20 25 30  
 Ala Tyr Ser Tyr Arg Pro Gly Pro Gly Ala Gly Pro Gly Pro Ala Ala  
 35 40 45  
 Gly Ala Ala Leu Pro Asp Gln Ser Phe Leu Trp Asn Val Phe Gln Arg  
 50 55 60  
 Val Asp Lys Asp Arg Ser Gly Val Ile Ser Asp Thr Glu Leu Gln Gln  
 65 70 75 80



1103

Ala Leu Ser Asn Gly Thr Trp Thr Pro Phe Asn Pro Val Thr Val Arg  
                             85                            90                            95

Ser Ile Ile Ser Met Phe Asp Arg Glu Asn Lys Ala Gly Val Asn Phe  
                             100                            105                            110

Ser Glu Phe Thr Gly Val Trp Lys Tyr Ile Thr Asp Trp Gln Asn Val  
                             115                            120                            125

Phe Arg Thr Tyr Asp Arg Asp Asn Ser Gly Met Ile Asp Lys Asn Glu  
                             130                            135                            140

Leu Lys Gln Ala Leu Xaa Val Ser Ala Thr Gly Ser Leu Thr Ser Ser  
                             145                            150                            155                            160

Thr Thr Ser Ser Phe Glu Xaa Leu Thr Gly Xaa Gly Arg Gly Xaa Ser  
                             165                            170                            175

Xaa Ser Thr Xaa  
                             180

<210> 1105  
 <211> 241  
 <212> PRT  
 <213> Homo sapiens

<400> 1105  
 Thr Thr Arg Phe Pro Ser Gly Gln Pro Leu Lys Pro Arg Pro Thr Leu  
     1                            5                            10                            15

Thr Ala Ala Gly Pro Arg Pro Gly Leu Leu Cys Phe Thr Ile Tyr Ile  
                             20                            25                            30

Met Asn Pro Ser Met Lys Gln Lys Gln Glu Glu Ile Lys Glu Asn Ile  
                             35                            40                            45

Lys Asn Ser Ser Val Pro Arg Arg Thr Leu Lys Met Ile Gln Pro Ser  
                             50                            55                            60

Ala Ser Gly Ser Leu Val Gly Arg Glu Asn Glu Leu Ser Ala Gly Leu  
                             65                            70                            75                            80

Ser Lys Arg Lys His Arg Asn Asp His Leu Thr Ser Thr Thr Ser Ser  
                             85                            90                            95

Pro Gly Val Ile Val Pro Glu Ser Ser Glu Asn Lys Asn Leu Gly Gly  
                             100                            105                            110

Val Thr Gln Glu Ser Phe Asp Leu Met Ile Lys Glu Asn Pro Ser Ser

1104

115	120	125
Gln Tyr Trp Lys Glu Val Ala Glu Lys Arg Arg Lys Ala Leu Tyr Glu		
130	135	140
Ala Leu Lys Glu Asn Glu Lys Leu His Lys Glu Ile Glu Gln Lys Asp		
145	150	155 160
Asn Glu Ile Ala Arg Leu Lys Lys Glu Asn Lys Glu Leu Ala Glu Val		
	165	170 175
Ala Glu His Val Gln Tyr Met Ala Glu Leu Ile Glu Arg Leu Asn Gly		
	180	185 190
Glu Pro Leu Asp Asn Phe Glu Ser Leu Asp Asn Gln Glu Phe Asp Ser		
	195	200 205
Glu Glu Glu Thr Val Glu Asp Ser Leu Val Glu Asp Ser Glu Ile Gly		
	210	215 220
Thr Cys Ala Glu Gly Thr Val Ser Ser Ser Thr Asp Ala Lys Pro Cys		
225	230	235 240
Ile		

&lt;210&gt; 1106

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1106

Phe His Thr Glu Phe Ile Thr Ile Trp Asp Val Arg Gln Cys Ser Asn
1 5 10 15

Lys His Cys Gln His Val Asn Phe Leu Lys Ser Val Gly His Ile Ala
20 25 30

Lys Asn Leu Leu Lys His Asn Cys Ile Phe Cys Phe Arg Ala Leu Leu
35 40 45

Met Phe Cys Arg Ser Asn Val Cys Ile Phe Leu Leu Asn Lys Leu Val
50 55 60

Leu Ile Leu Glu Leu Ser Asp Asp Phe Val Leu Glu Arg Thr Thr Gln
65 70 75 80

Arg Arg Gln Cys Lys Ser Lys Ser
85

1105

&lt;210&gt; 1107

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1107

Leu Val Val Leu Lys Arg Arg Pro Glu Lys Ser Gln Gly His Glu His  
1 5 10 15

Arg Ala Met Pro Phe Leu Asp Ile Gln Lys Arg Phe Gly Leu Asn Ile  
20 25 30

Asp Arg Trp Leu Thr Ile Gln Ser Gly Glu Gln Pro Tyr Lys Met Ala  
35 40 45

Gly Arg Cys His Ala Phe Glu Lys Glu Trp Ile Glu Cys Ala His Gly  
50 55 60

Ile Gly Tyr Thr Arg Ala Glu Lys Glu Cys Lys Ile Glu Tyr Asp Asp  
65 70 75 80

Phe Val Glu Cys Leu Leu Arg Gln Lys Thr Met Arg Arg Ala Gly Thr  
85 90 95

Ile Arg Lys Gln Arg Asp Lys Leu Ile Lys Glu Gly Lys Tyr Thr Pro  
100 105 110

Pro Pro His His Ile Gly Lys Gly Glu Pro Arg Pro  
115 120

&lt;210&gt; 1108

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (32)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (186)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1108

1106

His Leu Leu Cys Cys Arg Ala Gln Arg Arg Pro Gln Thr Pro Pro Ala  
 1 5 10 15  
 Ala Arg Gly Leu Glu Pro Ala Gln Arg Cys Phe Glu Asp Ala Gly Xaa  
 20 25 30  
 Pro Pro Leu Leu Leu Ala Ala Val Leu Leu Gly Leu Val Leu Leu Val  
 35 40 45  
 Val Leu Leu Leu Leu Leu Arg His Trp Gly Trp Gly Leu Cys Leu Ile  
 50 55 60  
 Gly Trp Asn Glu Phe Ile Leu Gln Pro Ile His Asn Leu Leu Met Gly  
 65 70 75 80  
 Asp Thr Lys Glu Gln Arg Ile Leu Asn His Val Leu Gln His Ala Glu  
 85 90 95  
 Pro Gly Asn Ala Gln Ser Val Leu Glu Ala Ile Asp Thr Tyr Cys Glu  
 100 105 110  
 Gln Lys Glu Trp Ala Met Asn Val Gly Asp Lys Lys Gly Lys Ile Val  
 115 120 125  
 Asp Ala Val Ile Gln Glu His Gln Pro Ser Val Leu Leu Glu Leu Gly  
 130 135 140  
 Ala Tyr Cys Gly Tyr Ser Ala Val Arg Met Ala Arg Leu Leu Ser Pro  
 145 150 155 160  
 Gly Ala Arg Leu Ile Thr Ile Glu Ile Asn Pro Asp Cys Ala Ala Ile  
 165 170 175  
 Thr Gln Arg Met Val Asp Phe Ala Gly Xaa Lys Asp Lys Val Thr Leu  
 180 185 190  
 Val Val Gly Ala Ser Gln Asp Ile Ile Pro Gln Leu Lys Lys Lys Tyr  
 195 200 205  
 Asp Val Asp Thr Leu Asp Met Val Phe Leu Asp His Trp Lys Asp Arg  
 210 215 220  
 Tyr Leu Pro Asp Thr Leu Leu Leu Glu Glu Cys Gly Leu Leu Arg Lys  
 225 230 235 240  
 Gly Thr Val Leu Leu Ala Asp Asn Val Ile Cys Pro Gly Ala Pro Asp  
 245 250 255  
 Phe Leu Ala His Val Arg Gly Ser Ser Cys Phe Glu Cys Thr His Tyr  
 260 265 270

1107

Gln Ser Phe Leu Glu Tyr Arg Glu Val Val Asp Gly Leu Glu Lys Ala  
 275 280 285

Ile Tyr Lys Gly Pro Gly Ser Glu Ala Gly Pro  
 290 295

&lt;210&gt; 1109

&lt;211&gt; 300

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1109

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Arg Leu Arg Asp Leu  
 1 5 10 15

Leu Thr Arg Arg Leu Thr Gly Ser Asn Tyr Pro Gly Leu Ser Ile Ser  
 20 25 30

Leu Arg Leu Thr Gly Ser Ser Ala Gln Glu Xaa Ala Ser Gly Val Ala  
 35 40 45

Leu Gly Glu Ala Pro Asp His Ser Tyr Glu Ser Leu Arg Val Thr Ser  
 50 55 60

Ala Gln Lys His Val Leu His Val Gln Leu Asn Arg Pro Asn Lys Arg  
 65 70 75 80

Asn Ala Met Asn Lys Val Phe Trp Arg Glu Met Val Glu Cys Phe Asn  
 85 90 95

Lys Ile Ser Arg Asp Ala Asp Cys Arg Ala Val Val Ile Ser Gly Ala  
 100 105 110

Gly Lys Met Phe Thr Ala Gly Ile Asp Leu Met Asp Met Ala Ser Asp  
 115 120 125

Ile Leu Gln Pro Lys Gly Asp Asp Val Ala Arg Ile Ser Trp Tyr Leu  
 130 135 140

Arg Asp Ile Ile Thr Arg Tyr Gln Glu Thr Phe Asn Val Ile Glu Arg  
 145 150 155 160

Cys Pro Lys Pro Val Ile Ala Ala Val His Gly Gly Cys Ile Gly Gly  
 165 170 175

1108

Gly Val Asp Leu Val Thr Ala Cys Asp Ile Arg Tyr Cys Ala Gln Asp  
 180 185 190

Ala Phe Phe Gln Val Lys Glu Val Asp Val Gly Leu Ala Ala Asp Val  
 195 200 205

Gly Thr Leu Gln Arg Leu Pro Lys Val Ile Gly Asn Gln Ser Leu Val  
 210 215 220

Asn Glu Leu Ala Phe Thr Ala Arg Lys Met Met Ala Asp Glu Ala Leu  
 225 230 235 240

Gly Ser Gly Leu Val Ser Arg Val Phe Pro Asp Lys Glu Val Met Leu  
 245 250 255

Asp Ala Ala Leu Ala Leu Ala Ala Glu Ile Ser Ser Lys Ser Pro Val  
 260 265 270

Ala Cys Arg Ala Pro Arg Ser Thr Cys Cys Ile Pro Ala Thr Ile Arg  
 275 280 285

Trp Pro Arg Ala Ser Thr Thr Trp Arg Pro Gly Thr  
 290 295 300

&lt;210&gt; 1110

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1110

Arg Ser Cys Ala Leu Val Cys Lys His Trp Tyr Arg Cys Leu His Gly  
 1 5 10 15

Asp Glu Asn Ser Glu Val Trp Arg Ser Leu Cys Ala Arg Ser Leu Ala  
 20 25 30

Glu Glu Ala Leu Arg Thr Asp Ile Leu Cys Asn Leu Pro Ser Tyr Lys  
 35 40 45

Ala Lys Ile Arg Ala Phe Gln His Ala Phe Ser Thr Asn Asp Cys Ser  
 50 55 60

Arg Asn Val Tyr Ile Lys Lys Asn Gly Phe Thr Leu His Arg Asn Pro  
 65 70 75 80

Ile Ala Gln Ser Thr Asp Gly Ala Arg Thr Lys Ile Gly Phe Ser Glu  
 85 90 95

1109

Gly Arg His Ala Trp Glu Val Trp Trp Glu Gly Pro Leu Gly Thr Val  
100 105 110

Ala Val Ile Gly Ile Ala Thr Lys Arg Ala Pro Met Gln Cys Gln Gly  
115 120 125

Tyr Val Ala Leu Leu Gly Ser Asp Asp Gln Ser Trp Gly Trp Asn Leu  
130 135 140

Val Asp Asn Asn Leu Leu His Asn Gly Glu Val Asn Gly Ser Phe Pro  
145 150 155 160

Gln Cys Asn Asn Ala Pro Lys Tyr Gln Ile Gly Glu Arg Ile Arg Val  
165 170 175

Ile Leu Asp Met Glu Asp Lys Thr Leu Ala Phe Glu Arg Gly Tyr Glu  
180 185 190

Phe Leu Gly Val Ala Phe Arg Gly Leu Pro Lys Val Cys Leu Tyr Pro  
195 200 205

Ala Val Ser Ala Val Tyr Gly Asn Thr Glu Val Thr Leu Val Tyr Leu  
210 215 220

Gly Lys Pro Leu Asp Gly  
225 230

&lt;210&gt; 1111

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (11)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1111

Pro Xaa Leu Thr Lys Gly Asn Lys Ser Trp Xaa Ser Thr Ala Val Xaa

```

1           5           10           15
Thr Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Pro
      20                      25                      30
Gln Lys Asn Leu Lys Asn Thr Val Phe Cys Ile Asp Ile Cys Thr Val
      35                      40                      45
Cys Val Cys Val Cys Glu Ile Lys Ile Arg Phe
      50                      55

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<400> 1112  
Cys Ile Xaa Gly Phe Tyr Phe Ala Val Leu Ala Pro Gln Glu Leu Leu  
1 5 10 15

Leu Val Ile Leu Lys Glu Trp Xaa Ser Lys Leu Trp His Arg Gln Ser  
85 90 95



IIII

Ile Val Val Ser Phe Leu Leu Leu Leu Ala Val Leu Ile Ala Thr Tyr  
 100 105 110

Tyr Val Glu Gly Val His Gln Gln Tyr Val Gln Arg Ile Glu Lys Gln  
 115 120 125

Phe Leu Leu Tyr Ala Tyr Trp Ile Gly Leu Gly Ile Leu Ser Ser Val  
 130 135 140

Gly Leu Gly Thr Gly Leu His Thr Phe Leu Leu Tyr Leu Gly Pro His  
 145 150 155 160

Ile Ala Ser Val Thr Leu Ala Ala Tyr Glu Cys Asn Ser Val Asn Phe  
 165 170 175

Pro Glu Pro Pro Tyr Pro Asp Gln Ile Ile Cys Pro Asp Glu Glu Gly  
 180 185 190

Thr Glu Gly Thr Ile Ser Leu Trp Ser Ile Ile Ser Lys Val Arg Ile  
 195 200 205

Glu Ala Cys Met Trp Gly Ile Gly Thr Ala Ile Gly Glu Leu Pro Pro  
 210 215 220

Tyr Phe Met Xaa Arg Ala Ala Arg Leu Ser Gly Ala Glu Pro Asp Asp  
 225 230 235 240

Glu Glu Tyr Gln Glu Phe Glu Glu Met Leu Glu His Ala Glu Ser Ala  
 245 250 255

Gln Asp Phe Ala Ser Arg Ala Lys Leu Ala Val Gln Lys Leu Val Gln  
 260 265 270

Lys Val Gly Phe Phe Gly Ile Leu Ala Cys Ala Ser Ile Pro Asn Pro  
 275 280 285

Leu Phe Asp Leu Ala Gly Ile Thr Cys Gly His Phe Leu Val Pro Phe  
 290 295 300

Trp Thr Phe Phe Gly Ala Thr Leu Ile Gly Lys Ala Ile Ile Lys Met  
 305 310 315 320

His Ile Gln Lys Ile Phe Val Ile Ile Thr Phe Ser Lys His Ile Val  
 325 330 335

Glu Gln Met Val Ala Phe Ile Gly Ala Val Pro Gly Ile Gly Pro Ser  
 340 345 350

Leu Gln Lys Pro Phe Gln Glu Tyr Leu Glu Ala Gln Arg Gln Lys Leu  
 355 360 365

1112

His His Lys Ser Glu Met Gly Thr Pro Gln Gly Glu Asn Trp Leu Ser  
 370 375 380

Trp Met Phe Glu Lys Leu Val Val Val Met Val Cys Tyr Phe Ile Leu  
 385 390 395 400

Ser Ile Ile Asn Ser Met Ala Gln Ser Tyr Ala Lys Arg Ile Gln Gln  
 405 410 415

Arg Leu Asn Ser Glu Glu Lys Thr Lys  
 420 425

&lt;210&gt; 1113

&lt;211&gt; 254

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1113

Xaa Ile Glu Ile Asn Pro His Val Lys Gly Thr Lys Ala Gly Ala Pro  
 1 5 10 15

Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu  
 20 25 30

Phe Gly Thr Ser Ser Ser Thr Pro Ala Arg Pro Ser Ser His His Ser  
 35 40 45

Ala Cys Phe Leu Gly Pro Glu Ile Met Pro Leu Gly Leu Leu Trp Leu  
 50 55 60

Gly Leu Ala Leu Leu Gly Ala Leu His Ala Gln Ala Gln Asp Ser Thr  
 65 70 75 80

Ser Asp Leu Ile Pro Ala Pro Pro Leu Ser Lys Val Pro Leu Gln Gln  
 85 90 95

Asn Phe Gln Asp Asn Gln Phe Gln Gly Lys Trp Tyr Val Val Gly Leu  
 100 105 110

Ala Gly Asn Ala Ile Leu Arg Glu Asp Lys Asp Pro Gln Lys Met Tyr  
 115 120 125

Ala Thr Ile Tyr Glu Leu Lys Glu Asp Lys Ser Tyr Asn Val Thr Ser

1113

130	135	140
Val Leu Phe Arg Lys Lys Lys Cys Asp Tyr Trp Ile Arg Thr Phe Val		
145	150	155 160
Pro Gly Cys Gln Pro Gly Glu Phe Thr Leu Gly Asn Ile Lys Ser Tyr		
	165	170 175
Pro Gly Leu Thr Ser Tyr Leu Val Arg Val Val Ser Thr Asn Tyr Asn		
	180	185 190
Gln His Ala Met Val Phe Phe Lys Lys Val Ser Gln Asn Arg Glu Tyr		
	195	200 205
Phe Lys Ile Thr Leu Tyr Gly Arg Thr Lys Glu Leu Thr Ser Glu Leu		
	210	215 220
Lys Glu Asn Phe Ile Arg Phe Ser Lys Ser Leu Gly Leu Pro Glu Asn		
	225	230 235 240
His Ile Val Phe Pro Val Pro Ile Asp Gln Cys Ile Asp Gly		
	245	250

&lt;210&gt; 1114

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1114

Ala Ser Glu Glu Ala Asn Pro Ala Gly Ile Arg Ala Ile Arg Thr Ala		
1	5	10 15
Thr Met Thr Val Gly Lys Ser Ser Lys Met Leu Gln His Ile Asp Tyr		
	20	25 30
Arg Met Arg Cys Ile Leu Gln Asp Gly Arg Ile Phe Ile Gly Thr Phe		
	35	40 45
Lys Ala Phe Asp Lys His Met Asn Leu Ile Leu Cys Asp Cys Asp Glu		
	50	55 60
Phe Arg Lys Ile Lys Pro Lys Asn Ser Lys Gln Ala Glu Arg Glu Glu		
	65	70 75 80
Lys Arg Val Leu Gly Leu Val Leu Leu Arg Gly Glu Asn Leu Val Ser		
	85	90 95
Met Thr Val Glu Gly Pro Pro Pro Lys Asp Thr Gly Ile Ala Arg Val		
	100	105 110

1114

Pro Leu Ala Gly Ala Ala Gly Gly Pro Gly Ile Gly Arg Ala Ala Gly  
115 120 125

Arg Gly Ile Pro Ala Gly Val Pro Met Pro Gln Ala Pro Ala Gly Leu  
130 135 140

Ala Gly Pro Val Arg Gly Val Gly Gly Pro Ser Gln Gln Val Met Thr  
145 150 155 160

Pro Gln Gly Arg Gly Thr Val Ala Ala Ala Ala Ala Ala Thr Ala  
165 170 175

Ser Ile Ala Gly Ala Pro Thr Gln Tyr Pro Pro Gly Arg Gly Gly Pro  
180 185 190

Pro Pro Pro Met Gly Arg Gly Ala Pro Pro Pro Gly Met Met Gly Pro  
195 200 205

Pro Pro Gly Met Arg Pro Pro Met Gly Pro Pro Met Gly Ile Pro Pro  
210 215 220

Gly Arg Gly Thr Pro Met Gly Met Pro Pro Pro Gly Met Arg Pro Pro  
225 230 235 240

Pro Pro Gly Met Arg Gly Leu Leu  
245

&lt;210&gt; 1115

&lt;211&gt; 777

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (14)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

1115

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (32)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1115

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Leu Thr Lys Gly Xaa Lys Ser Trp Xaa Ser Thr Ala Val Xaa Thr Ala
  1             5             10             15

Leu Glu Leu Val Xaa Pro Pro Gly Cys Arg Asn Ser Ala Arg Ala Xaa
      20             25             30

Pro Pro Leu Gly Ser Ser Pro Leu Gly Arg Arg Phe Arg Val Leu Ser
      35             40             45

Ser Leu Arg Arg Ser Pro Met Phe Glu Glu Lys Ala Ser Ser Pro Ser
      50             55             60

Gly Lys Met Gly Gly Glu Glu Lys Pro Ile Gly Ala Gly Glu Glu Lys
      65             70             75             80

Gln Lys Glu Gly Gly Lys Lys Lys Asn Lys Glu Gly Ser Gly Asp Gly
      85             90             95

Gly Arg Ala Glu Leu Asn Pro Trp Pro Glu Tyr Ile Tyr Thr Arg Leu
      100            105            110

Glu Met Tyr Asn Ile Leu Lys Ala Glu His Asp Ser Ile Leu Ala Glu
      115            120            125

Lys Ala Glu Lys Asp Ser Lys Pro Ile Lys Val Thr Leu Pro Asp Gly
      130            135            140

Lys Gln Val Asp Ala Glu Ser Trp Lys Thr Thr Pro Tyr Gln Ile Ala
      145            150            155            160

Cys Gly Ile Ser Gln Gly Leu Ala Asp Asn Thr Val Ile Ala Lys Val
      165            170            175

Asn Asn Val Val Trp Asp Leu Asp Arg Pro Leu Glu Glu Asp Cys Thr
      180            185            190

Leu Glu Leu Leu Lys Phe Glu Asp Glu Glu Ala Gln Ala Val Tyr Trp
      195            200            205

His Ser Ser Ala His Ile Met Gly Glu Ala Met Glu Arg Val Tyr Gly
      210            215            220

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1116

Gly Cys Leu Cys Tyr Gly Pro Pro Ile Glu Asn Gly Phe Tyr Tyr Asp  
 225 230 235 240  
 Met Tyr Leu Glu Glu Gly Gly Val Ser Ser Asn Asp Phe Ser Ser Leu  
 245 250 255  
 Glu Ala Leu Cys Lys Lys Ile Ile Lys Glu Lys Gln Ala Phe Glu Arg  
 260 265 270  
 Leu Glu Val Lys Lys Glu Thr Leu Leu Ala Met Phe Lys Tyr Asn Lys  
 275 280 285  
 Phe Lys Cys Arg Ile Leu Asn Glu Lys Val Asn Thr Pro Thr Thr Thr  
 290 295 300  
 Val Tyr Arg Cys Gly Pro Leu Ile Asp Leu Cys Arg Gly Pro His Val  
 305 310 315 320  
 Arg His Thr Gly Lys Ile Lys Ala Leu Lys Ile His Lys Asn Ser Ser  
 325 330 335  
 Thr Tyr Trp Glu Gly Lys Ala Asp Met Glu Thr Leu Gln Arg Ile Tyr  
 340 345 350  
 Gly Ile Ser Phe Pro Asp Pro Lys Met Leu Lys Glu Trp Glu Lys Phe  
 355 360 365  
 Gln Glu Glu Ala Lys Asn Arg Asp His Arg Lys Ile Gly Arg Asp Gln  
 370 375 380  
 Glu Leu Tyr Phe Phe His Glu Leu Ser Pro Gly Ser Cys Phe Phe Leu  
 385 390 395 400  
 Pro Lys Gly Ala Tyr Ile Tyr Asn Ala Leu Ile Glu Phe Ile Arg Ser  
 405 410 415  
 Glu Tyr Arg Lys Arg Gly Phe Gln Glu Val Val Thr Pro Asn Ile Phe  
 420 425 430  
 Asn Ser Arg Leu Trp Met Thr Ser Gly His Trp Gln His Tyr Ser Glu  
 435 440 445  
 Asn Met Phe Ser Phe Glu Val Glu Lys Glu Leu Phe Ala Leu Lys Pro  
 450 455 460  
 Met Asn Cys Pro Gly His Cys Leu Met Phe Asp His Arg Pro Arg Ser  
 465 470 475 480  
 Trp Arg Glu Leu Pro Leu Arg Leu Ala Asp Phe Gly Val Leu His Arg  
 485 490 495

1117

Asn Glu Leu Ser Gly Ala Leu Thr Gly Leu Thr Arg Val Arg Arg Phe  
 500 505 510

Gln Gln Asp Asp Ala His Ile Phe Cys Ala Met Glu Gln Ile Glu Asp  
 515 520 525

Glu Ile Lys Gly Cys Leu Asp Phe Leu Arg Thr Val Tyr Ser Val Phe  
 530 535 540

Gly Phe Ser Phe Lys Leu Asn Leu Ser Thr Arg Pro Glu Lys Phe Leu  
 545 550 555 560

Gly Asp Ile Glu Val Trp Asp Gln Ala Glu Lys Gln Leu Glu Asn Ser  
 565 570 575

Leu Asn Glu Phe Gly Glu Lys Trp Glu Leu Asn Ser Gly Asp Gly Ala  
 580 585 590

Phe Tyr Gly Pro Lys Ile Asp Ile Gln Ile Lys Asp Ala Ile Gly Arg  
 595 600 605

Tyr His Gln Cys Ala Thr Ile Gln Leu Asp Phe Gln Leu Pro Ile Arg  
 610 615 620

Phe Asn Leu Thr Tyr Val Ser His Asp Gly Asp Asp Lys Lys Arg Pro  
 625 630 635 640

Val Ile Val His Arg Ala Ile Leu Gly Ser Val Glu Arg Met Ile Ala  
 645 650 655

Ile Leu Thr Glu Asn Tyr Gly Gly Lys Trp Pro Phe Trp Leu Ser Pro  
 660 665 670

Arg Gln Val Met Val Val Pro Val Gly Pro Thr Cys Asp Glu Tyr Ala  
 675 680 685

Gln Lys Val Arg Gln Gln Phe His Asp Ala Lys Phe Met Ala Asp Ile  
 690 695 700

Asp Leu Asp Pro Gly Cys Thr Leu Asn Lys Lys Ile Arg Asn Ala Gln  
 705 710 715 720

Leu Ala Gln Tyr Asn Phe Ile Leu Val Val Gly Glu Lys Glu Lys Ile  
 725 730 735

Ser Gly Thr Val Asn Ile Arg Thr Arg Asp Asn Lys Val His Gly Glu  
 740 745 750

Arg Thr Ile Ser Glu Thr Ile Glu Arg Leu Gln Gln Leu Lys Glu Phe  
 755 760 765

1118

Arg Ser Lys Gln Ala Glu Glu Glu Phe  
 770 775

<210> 1116  
 <211> 360  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (5)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (19)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (29)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (38)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <400> 1116  
 Thr Thr Ser Ala Xaa Arg Trp Asp Gly Thr Arg Gly Arg Thr Arg Gly  
 1 5 10 15  
 Arg Thr Xaa Gly Phe Gly Asn Leu Ser Ile Thr Gln Xaa Trp Met Met  
 20 25 30  
 Trp Ala Met Val Ser Xaa Met Glu Ile Asp Gln Pro Ala Gly Thr Gly  
 35 40 45  
 Thr Leu Ser Arg Thr Asn Pro Pro Thr Gln Lys Pro Pro Ser Pro Pro  
 50 55 60  
 Met Ser Gly Arg Gly Thr Leu Gly Arg Asn Thr Pro Tyr Lys Thr Leu  
 65 70 75 80  
 Glu Pro Val Lys Pro Pro Thr Val Pro Asn Asp Tyr Met Thr Ser Pro  
 85 90 95  
 Ala Arg Leu Gly Ser Gln His Ser Pro Gly Arg Thr Ala Ser Leu Asn



100

110

Glu Ser Ile Met His Tyr Thr Asp  
355 360

1120

&lt;210&gt; 1117

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (86)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1117

Pro Ala Arg Leu Gly Ile Thr Cys His Ser Pro Ala Ile Leu Ser Thr  
 1 5 10 15

Ala Leu Trp Gly Gly Ser Ser Pro Ile Pro Asp Ala Pro Thr Thr Gln  
 20 25 30

Trp Lys Val Thr Lys Pro Ala Pro Cys Pro Arg Pro Arg Arg Val Glu  
 35 40 45

Pro Val Cys Ser Gly Leu Gln Ala Gln Ile Leu His Cys Tyr Arg Asp  
 50 55 60

Arg Pro His Glu Val Leu Leu Cys Ser Asp Leu Val Lys Ala Tyr Gln  
 65 70 75 80

Arg Cys Val Ser Ala Xaa His Lys Gly  
 85

&lt;210&gt; 1118

&lt;211&gt; 347

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1118

Arg Gly Val Val Asp Ser Glu Asp Leu Pro Leu Asn Ile Ser Arg Glu  
 1 5 10 15

Met Leu Gln Gln Ser Lys Ile Leu Lys Val Ile Arg Lys Asn Ile Val  
 20 25 30

Lys Lys Cys Leu Glu Leu Phe Ser Glu Leu Ala Glu Asp Lys Glu Asn  
 35 40 45

Tyr Lys Lys Phe Tyr Glu Ala Phe Ser Lys Asn Leu Lys Leu Gly Ile  
 50 55 60

His Glu Asp Ser Thr Asn Arg Arg Arg Leu Ser Glu Leu Leu Arg Tyr

1121

65		70		75		80
His Thr Ser Gln Ser Gly Asp Glu Met Thr Ser Leu Ser Glu Tyr Val						
	85			90		95
Ser Arg Met Lys Glu Thr Gln Lys Ser Ile Tyr Tyr Ile Thr Gly Glu						
	100		105		110	
Ser Lys Glu Gln Val Ala Asn Ser Ala Phe Val Glu Arg Val Arg Lys						
	115		120		125	
Arg Gly Phe Glu Val Val Tyr Met Thr Glu Pro Ile Asp Glu Tyr Cys						
	130		135		140	
Val Gln Gln Leu Lys Glu Phe Asp Gly Lys Ser Leu Val Ser Val Thr						
	145		150		155	160
Lys Glu Gly Leu Glu Leu Pro Glu Asp Glu Glu Glu Lys Lys Lys Met						
		165		170		175
Glu Glu Ser Lys Ala Lys Phe Glu Asn Leu Cys Lys Leu Met Lys Glu						
	180		185			190
Ile Leu Asp Lys Lys Val Glu Lys Val Thr Ile Ser Asn Arg Leu Val						
	195		200		205	
Ser Ser Pro Cys Cys Ile Val Thr Ser Thr Tyr Gly Trp Thr Ala Asn						
	210		215		220	
Met Glu Arg Ile Met Lys Ala Gln Ala Leu Arg Asp Asn Ser Thr Met						
	225		230		235	240
Gly Tyr Met Met Ala Lys Lys His Leu Glu Ile Asn Pro Asp His Pro						
		245		250		255
Ile Val Glu Thr Leu Arg Gln Lys Ala Glu Ala Asp Lys Asn Asp Lys						
	260		265			270
Ala Val Lys Asp Leu Val Val Leu Leu Phe Glu Thr Ala Leu Leu Ser						
	275		280		285	
Ser Gly Phe Ser Leu Glu Asp Pro Gln Thr His Ser Asn Arg Ile Tyr						
	290		295		300	
Arg Met Ile Lys Leu Gly Leu Gly Ile Asp Glu Asp Glu Val Ala Ala						
	305		310		315	320
Glu Glu Pro Asn Ala Ala Val Pro Asp Glu Ile Pro Pro Leu Glu Gly						
		325		330		335
Asp Glu Asp Ala Ser Arg Met Glu Glu Val Asp						

1122

340

345

&lt;210&gt; 1119

&lt;211&gt; 293

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (170)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1119

Pro Gly Ser Pro Asp Val Asn Arg Ala Val Val Arg Pro Pro Pro Pro  
 1 5 10 15

Pro Pro Pro Pro Pro Pro Ala Pro Gln Pro Thr Met Ser Arg Arg Lys  
 20 25 30

Gln Gly Lys Pro Gln His Leu Ser Lys Arg Glu Phe Ser Pro Glu Pro  
 35 40 45

Leu Glu Ala Ile Leu Thr Asp Asp Glu Pro Asp His Gly Pro Leu Gly  
 50 55 60

Ala Pro Glu Gly Asp His Asp Leu Leu Thr Cys Gly Gln Cys Gln Met  
 65 70 75 80

Asn Phe Pro Leu Gly Asp Ile Leu Ile Phe Ile Glu His Lys Arg Lys  
 85 90 95

Gln Cys Asn Gly Ser Leu Cys Leu Glu Lys Ala Val Asp Lys Pro Pro  
 100 105 110

Ser Pro Ser Pro Ile Glu Met Lys Lys Ala Ser Asn Pro Val Glu Val  
 115 120 125

Gly Ile Gln Val Thr Pro Glu Asp Asp Asp Cys Leu Ser Thr Ser Ser  
 130 135 140

Arg Gly Ile Cys Pro Lys Gln Glu His Ile Ala Asp Lys Leu Leu His  
 145 150 155 160

Trp Arg Gly Leu Ser Ser Pro Arg Ser Xaa Thr Trp Ser Ser Asn Pro  
 165 170 175

His Ala Trp Asp Glu Cys Arg Ile Cys Pro Ala Gly Ile Cys Lys Asp  
 180 185 190

```
<210> 1120 :
<211> 190
<212> PRT
<213> Homo sapiens
```

Ala Ala Ala Ala Ala Gly Asp Pro Gly Ala Met Gly Arg Ala Arg Asp  
1 5 10 15

Ala Ile Leu Asp Ala Leu Glu Asn Leu Thr Ala Glu Glu Leu Lys Lys  
20 25 30

Phe Lys Leu Lys Leu Leu Ser Val Pro Leu Arg Glu Gly Tyr Gly Arg  
35 40 45

Ile Pro Arg Gly Ala Leu Leu Ser Met Asp Ala Leu Asp Leu Thr Asp  
50 55 60

Lys Leu Val Ser Phe Tyr Leu Glu Thr Tyr Gly Ala Glu Leu Thr Ala  
65 70 75 80

Asn Val Leu Arg Asp Met Gly Leu Gln Glu Met Ala Gly Gln Leu Gln  
85 90 95

Ala Ala Thr His Gln Gly Ser Gly Ala Ala Pro Ala Gly Ile Gln Ala  
100 105 110

Pro Pro Gln Ser Ala Ala Lys Pro Gly Leu His Phe Ile Asp Gln His

1124

115                      120                      125  
 Arg Ala Ala Leu Ile Ala Arg Val Thr Asn Val Glu Trp Leu Leu Asp  
 130                      135                      140  
 Ala Leu Tyr Gly Lys Val Leu Thr Asp Glu Gln Tyr Gln Ala Val Arg  
 145                      150                      155                      160  
 Pro Ser Pro Pro Thr Gln Ala Arg Cys Gly Ser Ser Ser Val Ser His  
 165                      170                      175  
 Gln Pro Gly Thr Gly Pro Ala Arg Thr Cys Ser Ser Arg Pro  
 180                      185                      190

<210> 1121  
 <211> 217  
 <212> PRT  
 <213> Homo sapiens

<400> 1121  
 Gly Arg Lys Trp Phe Cys Pro Tyr Lys Thr Trp Arg Lys Ala Phe Leu  
 1                      5                      10                      15  
 Ser Pro Arg Lys Arg His Val Met Ser Gln Ser Cys Gly Ala Arg Ala  
 20                      25                      30  
 Glu Val Gln Ala Thr Gly Ser Asp Gly Ala Pro Thr Lys Ala Leu Gly  
 35                      40                      45  
 Leu Val Arg Val Ala Ala Val Ser Ser Asp Ser Cys Val Val Pro Met  
 50                      55                      60  
 Val Glu Lys Lys Thr Ser Val Arg Ser Gln Asp Pro Gly Gln Arg Arg  
 65                      70                      75                      80  
 Val Leu Asp Arg Ala Ala Arg Gln Arg Arg Ile Asn Arg Gln Leu Glu  
 85                      90                      95  
 Ala Leu Glu Asn Asp Asn Phe Gln Asp Asp Pro His Ala Gly Leu Pro  
 100                      105                      110  
 Gln Leu Gly Lys Arg Leu Pro Gln Phe Asp Asp Asp Ala Asp Thr Gly  
 115                      120                      125  
 Lys Lys Lys Lys Lys Thr Arg Gly Asp His Phe Lys Leu Arg Phe Arg  
 130                      135                      140  
 Lys Asn Phe Gln Ala Leu Leu Glu Glu Gln Asn Leu Ser Val Ala Glu  
 145                      150                      155                      160

1125

Gly Pro Asn Tyr Leu Thr Ala Cys Ala Gly Pro Pro Ser Arg Pro Gln  
165 170 175

Arg Pro Phe Cys Ala Val Cys Gly Phe Pro Ser Pro Tyr Thr Cys Val  
180 185 190

Ser Cys Gly Ala Arg Tyr Cys Thr Val Arg Cys Leu Gly Thr His Gln  
195 200 205

Glu Thr Arg Cys Leu Lys Trp Thr Val  
210 215

&lt;210&gt; 1122

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1122

Gly Asn Cys Gln Lys Cys Ala Phe Gly Tyr Ser Gly Leu Asp Cys Lys  
1 5 10 15

Asp Lys Phe Gln Leu Ile Leu Thr Ile Val Gly Thr Ile Ala Gly Ile  
20 25 30

Val Ile Leu Ser Met Ile Ile Ala Leu Ile Val Thr Ala Arg Ser Asn  
35 40 45

Asn Lys Thr Lys His Ile Glu Glu Glu Asn Leu Ile Asp Glu Asp Phe  
50 55 60

Gln Asn Leu Lys Leu Arg Ser Thr Gly Phe Thr Asn Leu Gly Ala Glu  
65 70 75 80

Gly Ser Val Phe Pro Lys Val Arg Ile Thr Ala Ser Arg Asp Ser Gln  
85 90 95

Met Gln Asn Pro Tyr Ser Ser His Ser Ser Met Pro Arg Pro Asp Tyr  
100 105 110

&lt;210&gt; 1123

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

1126

&lt;400&gt; 1123

Gly Lys Leu Val Cys Gly Met Val Ser Tyr Leu Asn Asp Leu Pro Ser  
 1 5 10 15

Gln Arg Ile Gln Pro Gln Gln Val Ala Val Trp Pro Thr Met Val Asp  
 20 25 30

Ile Asn Ser Pro Glu Ser Leu Thr Glu Ala Tyr Lys Leu Arg Ala Ala  
 35 40 45

Arg Leu Val Glu Ile Ala Ala Lys Asn Leu Gln Lys Glu Val Ile His  
 50 55 60

Arg Lys Ser Lys Glu Val Ala Trp Asn Leu Thr Ser Val Asp Leu Val  
 65 70 75 80

Arg Ala Ser Glu Ala His Cys His Tyr Val Val Val Lys Leu Phe Ser  
 85 90 95

Glu Lys Leu Leu Lys Ile Gln Asp Lys Ala Ile Gln Ala Val Leu Arg  
 100 105 110

Ser Leu Cys Leu Leu Tyr Ser Leu Tyr Gly Ile Ser Gln Asn Ala Gly  
 115 120 125

Asp Phe Leu Gln Gly Ser Ile Met Thr Glu Pro Gln Ile Thr Gln Val  
 130 135 140

Asn Gln Arg Val Lys Glu Leu Leu Thr Leu Ile Arg Ser Asp Ala Val  
 145 150 155 160

Ala Leu Val Asp Ala Phe Asp Phe Gln Asp Val Thr Leu Gly Ser Val  
 165 170 175

Leu Gly Arg Tyr Asp Gly Asn Val Tyr Glu Asn Leu Phe Glu Trp Ala  
 180 185 190

Lys Asn Ser Pro Leu Asn Lys Ala Glu Val His Glu Ser Tyr Lys His  
 195 200 205

Leu Lys Ser Leu Gln Ser Lys Leu  
 210 215

&lt;210&gt; 1124

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



1127

&lt;400&gt; 1124

Pro Ser Pro Arg Pro Pro Asp Pro Glu Ser Ser Gln Leu Arg Pro Gly  
1 5 10 15  
Gly Asp Gly Ala Glu Leu Arg Val Leu Val Asp Met Asp Gly Val Leu  
20 25 30  
Ala Asp Phe Glu Ala Gly Leu Leu Arg Gly Phe Arg Arg Arg Phe Pro  
35 40 45  
Glu Glu Pro His Val Pro Leu Glu Gln Arg Arg Gly Phe Leu Ala Arg  
50 55 60  
Glu Gln Tyr Arg Ala Leu Arg Pro Asp Leu Ala Asp Lys Val Ala Ser  
65 70 75 80  
Val Tyr Glu Ala Pro Gly Phe Phe Leu Asp Leu Glu Pro Ile Pro Gly  
85 90 95  
Ala Leu Asp Ala Val Arg Glu Met Asn Asp Leu Pro Asp Thr Gln Val  
100 105 110  
Phe Ile Cys Thr Ser Pro Leu Leu Lys Tyr His His Cys Val Gly Glu  
115 120 125  
Lys Tyr Arg Trp Val Glu Gln His Leu Gly Pro Gln Phe Val Glu Arg  
130 135 140  
Ile Ile Leu Thr Arg Asp Lys Thr Val Val Leu Gly Asp Leu Leu Ile  
145 150 155 160  
Asp Asp Lys Asp Thr Val Arg Gly Gln Glu Glu Thr Pro Ser Trp Glu  
165 170 175  
His Ile Leu Phe Thr Cys Cys His Asn Arg His Leu Val Leu Pro Pro  
180 185 190  
Thr Arg Arg Arg Leu Leu Ser Trp Ser Asp Asn Trp Arg Glu Ile Leu  
195 200 205  
Asp Ser Lys Arg Gly Ala Ala Gln Arg Glu  
210 215

&lt;210&gt; 1125

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1125

1128

Met Arg Arg Arg Val Phe Phe Leu His Arg Cys Ser Ile Leu Val Phe  
 1 5 10 15  
 Leu Phe Pro Cys Lys Cys Asn Gln Met Pro Phe Tyr Met Trp Thr Tyr  
 20 25 30  
 Leu Tyr Trp Pro Asn Ile Phe Phe Leu Leu Ser Leu Phe Phe Phe Pro  
 35 40 45  
 Phe Phe Leu Leu Pro Leu Phe Leu Tyr Ser Phe Leu Phe Leu Phe Phe  
 50 55 60  
 Phe Phe Phe Ser Phe Phe Phe Gly Ser Cys Cys Tyr Pro Arg His Phe  
 65 70 75 80  
 Thr Ser Pro Ser Leu Lys Gly  
 85

&lt;210&gt; 1126

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (173)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1126

Pro Pro Leu Gly Lys Lys Xaa Glu Leu His Arg Gly Gly Gly Arg Ser  
 1 5 10 15  
 Arg Leu Glu Glu Phe Gln Met Arg Ala Arg Pro Arg Pro Arg Pro Leu  
 20 25 30  
 Trp Ala Thr Val Leu Ala Leu Gly Ala Leu Ala Gly Val Gly Val Gly  
 35 40 45  
 Gly Pro Asn Ile Cys Thr Thr Arg Gly Val Ser Ser Cys Gln Gln Cys  
 50 55 60  
 Leu Ala Val Ser Pro Met Cys Ala Trp Cys Ser Asp Glu Ala Leu Pro  
 65 70 75 80

1129

Leu Gly Ser Pro Arg Cys Asp Leu Lys Glu Asn Leu Leu Lys Asp Asn  
85 90 95

Cys Ala Pro Glu Ser Ile Glu Phe Pro Val Ser Glu Ala Arg Val Leu  
100 105 110

Glu Asp Arg Pro Leu Ser Asp Lys Gly Ser Gly Asp Ser Ser Gln Val  
115 120 125

Thr Gln Val Ser Pro Gln Arg Ile Ala Leu Arg Leu Arg Pro Asp Asp  
130 135 140

Ser Lys Asn Phe Ser Ile Gln Val Arg Gln Val Glu Asp Tyr Pro Val  
145 150 155 160

Asp Ile Tyr Tyr Leu Met Asp Leu Ser Tyr Ser Met Xaa Gly  
165 170

<210> 1127

<211> 359

<212> PRT

<213> Homo sapiens

<400> 1127

Pro Gln Pro Phe Gln Gly Ser Gly Cys Val Ile Ala Ile Leu Gly Lys  
1 5 10 15

Arg Cys Ser Arg Pro Trp Arg Thr Trp Arg Gly Arg Thr Pro Ser Thr  
20 25 30

Arg His Ile Cys Ser Trp Cys Thr Met Val Ser Gly Thr Ser Ala Ala  
35 40 45

Val Glu Glu Tyr Ser Cys Glu Phe Gly Ser Ala Lys Tyr Tyr Ala Leu  
50 55 60

Cys Gly Phe Gly Gly Val Leu Ser Cys Gly Leu Thr His Thr Ala Val  
65 70 75 80

Val Pro Leu Asp Leu Val Lys Cys Arg Met Gln Val Asp Pro Gln Lys  
85 90 95

Tyr Lys Gly Ile Phe Asn Gly Phe Ser Val Thr Leu Lys Glu Asp Gly  
100 105 110

Val Arg Gly Leu Ala Lys Gly Trp Ala Pro Thr Phe Leu Gly Tyr Ser  
115 120 125

Met Gln Gly Leu Cys Lys Phe Gly Phe Tyr Glu Val Phe Lys Val Leu

1130

130	135	140
Tyr. Ser Asn Met Leu Gly Glu Glu Asn Thr Tyr Leu Trp Arg Thr Ser		
145	150	155 160
Leu Tyr Leu Ala Ala Ser Ala Ser Ala Glu Phe Phe Ala Asp Ile Ala		
	165	170 175
Leu Ala Pro Met Glu Ala Ala Lys Val Arg Ile Gln Thr Gln Pro Gly		
	180	185 190
Tyr Ala Asn Thr Leu Arg Asp Ala Ala Pro Lys Met Tyr Lys Glu Glu		
	195	200 205
Gly Leu Lys Ala Phe Tyr Lys Gly Val Ala Pro Leu Trp Met Arg Gln		
210	215	220
Ile Pro Tyr Thr Met Met Lys Phe Ala Cys Phe Glu Arg Thr Val Glu		
225	230	235 240
Ala Leu Tyr Lys Phe Val Val Pro Lys Pro Arg Ser Glu Cys Ser Lys		
	245	250 255
Pro Glu Gln Leu Val Val Thr Phe Val Ala Gly Tyr Ile Ala Gly Val		
	260	265 270
Phe Cys Ala Ile Val Ser His Pro Ala Asp Ser Val Val Ser Val Leu		
	275	280 285
Asn Lys Glu Lys Gly Ser Ser Ala Ser Leu Val Leu Lys Arg Leu Gly		
290	295	300
Phe Lys Gly Val Trp Lys Gly Leu Phe Ala Arg Ile Ile Met Ile Gly		
305	310	315 320
Thr Leu Thr Ala Leu Gln Trp Phe Ile Tyr Asp Ser Val Lys Val Tyr		
	325	330 335
Phe Arg Leu Pro Arg Pro Pro Pro Pro Glu Met Pro Glu Ser Leu Lys		
	340	345 350
Lys Lys Leu Gly Leu Thr Gln		
355		

&lt;210&gt; 1128

&lt;211&gt; 399

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

1131

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (208)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (349)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1128

Leu Glu Pro Pro Ala Glu Pro Leu Gln Tyr Leu Ala Cys Tyr Arg Phe.  
 1 5 10 15

His Cys Ser His Gln Leu Gly Asp Asn Met Trp Phe Leu Thr Thr Leu  
 20 25 30

Leu Leu Trp Val Pro Val Asp Gly Gln Val Asp Thr Thr Lys Ala Val  
 35 40 45

Ile Thr Leu Gln Pro Pro Trp Val Ser Val Phe Gln Glu Glu Thr Val  
 50 55 60

Thr Leu His Cys Glu Val Leu His Leu Pro Gly Ser Ser Ser Thr Gln  
 65 70 75 80

Trp Phe Leu Asn Gly Thr Ala Thr Gln Thr Ser Thr Pro Ser Tyr Arg  
 85 90 95

Ile Thr Ser Ala Ser Val Asn Asp Ser Gly Glu Tyr Arg Cys Gln Arg  
 100 105 110

Gly Leu Ser Gly Arg Ser Asp Pro Ile Gln Leu Glu Ile His Arg Gly  
 115 120 125

Trp Leu Leu Leu Gln Val Ser Ser Arg Val Phe Thr Glu Gly Glu Pro  
 130 135 140

Leu Ala Leu Arg Cys His Ala Trp Lys Asp Lys Leu Val Tyr Asn Val  
 145 150 155 160

Leu Tyr Tyr Arg Asn Gly Lys Ala Phe Lys Phe Phe His Trp Asn Ser  
 165 170 175

Asn Leu Thr Ile Leu Lys Thr Asn Ile Ser His Asn Gly Thr Tyr His  
 180 185 190

Cys Ser Gly Met Gly Lys His Arg Tyr Thr Ser Ala Gly Ile Ser Xaa  
 195 200 205

Thr Val Lys Glu Leu Phe Pro Ala Pro Val Leu Asn Ala Ser Val Thr

1132

210	215	220
Ser Pro Leu Leu Glu Gly Asn Leu Val Thr Leu Ser Cys Glu Thr Lys		
225	230	235 240
Leu Leu Leu Gln Arg Pro Gly Leu Gln Leu Tyr Phe Ser Phe Tyr Met		
	245	250 255
Gly Ser Lys Thr Leu Arg Gly Arg Asn Thr Ser Ser Glu Tyr Gln Ile		
	260	265 270
Leu Thr Ala Arg Arg Glu Asp Ser Gly Leu Tyr Trp Cys Glu Ala Ala		
	275	280 285
Thr Glu Asp Gly Asn Val Leu Lys Arg Ser Pro Glu Leu Glu Leu Gln		
	290	295 300
Val Leu Gly Leu Gln Leu Pro Thr Pro Val Trp Phe His Val Leu Phe		
305	310	315 320
Tyr Leu Ala Val Gly Ile Met Phe Leu Val Asn Thr Val Leu Trp Val		
	325	330 335
Thr Ile Arg Lys Glu Leu Lys Arg Lys Lys Lys Trp Xaa Leu Glu Ile		
	340	345 350
Ser Leu Asp Ser Gly His Glu Lys Lys Val Ile Ser Ser Leu Gln Glu		
	355	360 365
Asp Arg His Leu Glu Glu Glu Leu Lys Cys Gln Glu Gln Lys Glu Glu		
	370	375 380
Gln Leu Gln Glu Gly Val His Arg Lys Glu Pro Gln Gly Ala Thr		
385	390	395

&lt;210&gt; 1129

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

1133

&lt;400&gt; 1129

Glu Ile Leu Phe Ile Phe Xaa Xaa Phe Phe Lys Gly Leu Ser Asn Ser  
 1 5 10 15

Ala Ala Ala Met Ala Pro Val Lys Lys Leu Val Val Lys Gly Gly Lys  
 20 25 30

Lys Lys Lys Gln Val Leu Lys Phe Thr Leu Asp Cys Thr His Pro Val  
 35 40 45

Glu Asp Gly Ile Met Asp Ala Ala Asn Phe Glu Gln Phe Leu Gln Glu  
 50 55 60

Arg Ile Lys Val Asn Gly Lys Ala Gly Asn Leu Gly Gly Gly Val Val  
 65 70 75 80

Thr Ile Glu Arg Ser Lys Ser Lys Ile Thr Val Thr Ser Glu Val Pro  
 85 90 95

Phe Ser Lys Arg Tyr Leu Lys Tyr Leu Thr Lys Lys Tyr Leu Lys Lys  
 100 105 110

Asn Asn Leu Arg Asp Trp Leu Arg Val Val Ala Asn Ser Lys Glu Ser  
 115 120 125

Tyr Glu Leu Arg Tyr Phe Gln Ile Asn Gln Asp Glu Glu Glu Glu  
 130 135 140

Asp Glu Asp  
 145

&lt;210&gt; 1130

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1130

Asn Cys Ser Pro Ala Phe Tyr Gly Ser Ser Leu Pro Cys Pro Gln Thr  
 1 5 10 15

Gln Gln Lys Arg Arg Gly Arg Ile Arg Gly Leu Ser Arg Pro Ala Pro  
 20 25 30

Leu Pro Thr Cys His Thr Arg Cys Glu Phe Glu His Ser Pro Glu Met  
 35 40 45

Glu Thr Ser His Pro Gln Leu Asn Asn Gly Pro Phe Met Pro Thr Leu  
 50 55 60

1134

Pro Thr Arg Arg Gly Gln Arg Cys Thr Arg Arg Pro Ser Ser Ser Pro  
 65 70 75 80

Ser Ser Ala Pro Ser His Tyr Ser Trp Phe Tyr  
 85 90

&lt;210&gt; 1131

&lt;211&gt; 510

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (228)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (352)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1131

Thr Ser Glu Glu Ser Arg Pro Arg Leu Ser Gln Leu Ser Val Thr Asp  
 1 5 10 15

Val Thr Thr Ser Ser Leu Arg Leu Asn Trp Glu Ala Pro Pro Gly Ala  
 20 25 30

Phe Asp Ser Phe Leu Leu Arg Phe Gly Val Pro Ser Pro Ser Thr Leu  
 35 40 45

Glu Pro His Pro Arg Pro Leu Leu Gln Arg Glu Leu Met Val Pro Gly  
 50 55 60

Thr Arg His Ser Ala Val Leu Arg Asp Leu Arg Ser Gly Thr Leu Tyr  
 65 70 75 80

Ser Leu Thr Leu Tyr Gly Leu Arg Gly Pro His Lys Ala Asp Ser Ile  
 85 90 95

Gln Gly Thr Ala Arg Thr Leu Ser Pro Val Leu Glu Ser Pro Arg Asp  
 100 105 110

Leu Gln Phe Ser Glu Ile Arg Glu Thr Ser Ala Lys Val Asn Trp Met  
 115 120 125

Pro Pro Pro Ser Arg Ala Asp Ser Phe Lys Val Ser Tyr Gln Leu Ala  
 130 135 140



1135

Asp Gly Gly Glu Pro Gln Ser Val Gln Val Asp Gly Gln Ala Arg Thr  
145 150 155 160

Gln Lys Leu Gln Gly Leu Ile Pro Gly Ala Arg Tyr Glu Val Thr Val  
165 170 175

Val Ser Val Arg Gly Phe Glu Glu Ser Glu Pro Leu Thr Gly Phe Leu  
180 185 190

Thr Thr Val Pro Asp Gly Pro Thr Gln Leu Arg Ala Leu Asn Leu Thr  
195 200 205

Glu Gly Phe Ala Val Leu His Trp Lys Pro Pro Gln Asn Pro Val Asp  
210 215 220

Thr Tyr Asp Xaa Gln Val Thr Ala Pro Gly Ala Pro Pro Leu Gln Ala  
225 230 235 240

Glu Thr Pro Gly Ser Ala Val Asp Tyr Pro Leu His Asp Leu Val Leu  
245 250 255

His Thr Asn Tyr Thr Ala Thr Val Arg Gly Leu Arg Gly Pro Asn Leu  
260 265 270

Thr Ser Pro Ala Ser Ile Thr Phe Thr Thr Gly Leu Glu Ala Pro Arg  
275 280 285

Asp Leu Glu Ala Lys Glu Val Thr Pro Arg Thr Ala Leu Leu Thr Trp  
290 295 300

Thr Glu Pro Pro Val Arg Pro Ala Gly Tyr Leu Leu Ser Phe His Thr  
305 310 315 320

Pro Gly Gly Gln Thr Gln Glu Ile Leu Leu Pro Gly Gly Ile Thr Ser  
325 330 335

His Gln Leu Leu Gly Leu Phe Pro Ser Thr Ser Tyr Asn Ala Arg Xaa  
340 345 350

Gln Ala Met Trp Gly Gln Ser Leu Leu Pro Pro Val Ser Thr Ser Phe  
355 360 365

Thr Thr Gly Gly Leu Arg Ile Pro Phe Pro Arg Asp Cys Gly Glu Glu  
370 375 380

Met Gln Asn Gly Ala Gly Ala Ser Arg Thr Ser Thr Ile Phe Leu Asn  
385 390 395 400

Gly Asn Arg Glu Arg Pro Leu Asn Val Phe Cys Asp Met Glu Thr Asp  
405 410 415

1136

Gly Gly Gly Trp Leu Val Phe Gln Arg Arg Met Asp Gly Gln Thr Asp  
420 425 430

Phe Trp Arg Asp Trp Glu Asp Tyr Ala His Gly Phe Gly Asn Ile Ser  
435 440 445

Gly Glu Phe Trp Leu Gly Asn Glu Ala Leu His Ser Leu Thr Gln Ala  
450 455 460

Gly Asp Tyr Ser Met Arg Val Asp Leu Arg Ala Gly Asp Glu Ala Val  
465 470 475 480

Phe Ala Gln Tyr Asp Ser Phe His Val Asp Ser Ala Ala Glu Tyr Tyr  
485 490 495

Arg Leu His Leu Glu Gly Tyr His Gly Thr Ala Gly Thr Pro  
500 505 510

<210> 1132  
<211> 430  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (182)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (216)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (408)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (410)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (414)  
<223> Xaa equals any of the naturally occurring L-amino acids

1137

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (420)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (428)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1132

Arg Thr Ala Asp Gln Thr Val Thr Ala Ala Leu Thr Lys Arg Ser Trp  
 1 5 10 15

Asn Ser Ser Ser Ser Pro Gln Arg Arg Thr Glu Gln Thr Ala Glu Thr  
 20 25 30

Met Glu Ser Pro Ser Ala Pro Pro His Arg Trp Cys Ile Pro Trp Gln  
 35 40 45

Arg Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr  
 50 55 60

Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly  
 65 70 75 80

Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln His Leu Phe Gly  
 85 90 95

Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Ile  
 100 105 110

Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr Ser  
 115 120 125

Gly Arg Glu Ile Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Ile  
 130 135 140

Ile Gln Asn Asp Thr Gly Phe Tyr Thr Leu His Val Ile Lys Ser Asp  
 145 150 155 160

Leu Val Asn Glu Glu Ala Thr Gly Gln Phe Arg Val Tyr Pro Glu Leu  
 165 170 175

Pro Lys Pro Ser Ile Xaa Ser Asn Asn Ser Lys Pro Val Glu Asp Lys  
 180 185 190

Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asp Ala Thr Tyr  
 195 200 205

Leu Trp Trp Val Asn Asn Gln Xaa Leu Pro Val Ser Pro Arg Leu Gln

1138

210	215	220
Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Phe Asn Val Thr Arg Asn		
225	230	235 240
Asp Thr Ala Ser Tyr Lys Cys Glu Thr Gln Asn Pro Val Ser Ala Arg		
	245	250 255
Arg Ser Asp Ser Val Ile Leu Asn Val Leu Tyr Gly Pro Asp Ala Pro		
	260	265 270
Thr Ile Ser Pro Leu Asn Thr Ser Tyr Arg Ser Gly Glu Asn Leu Asn		
	275	280 285
Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Phe		
290	295	300
Val Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn		
305	310	315 320
Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys Gln Ala His Asn Ser		
	325	330 335
Asp Thr Gly Leu Asn Arg Thr Thr Val Thr Thr Ile Thr Val Tyr Ala		
	340	345 350
Glu Pro Pro Lys Pro Phe Ile Thr Ser Asn Asn Ser Asn Pro Val Glu		
	355	360 365
Asp Glu Asp Ala Val Ala Leu Thr Cys Glu Pro Glu Ile Gln Asn Thr		
370	375	380
Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val Ser Pro Arg		
385	390	395 400
Leu His Leu Pro Met Thr Thr Xaa Pro Xaa Leu Tyr Ser Xaa Ala Gln		
	405	410 415
Gly Met Met Xaa Asp Pro Met Asn Val Glu Ser Xaa Thr Asn		
	420	425 430

&lt;210&gt; 1133

&lt;211&gt; 737

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

1139

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (140)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (186)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (194)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (308)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (534)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (535)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1133

Xaa His Ala Ser Ala Ala Xaa Pro Thr Val Thr Ala Ala Leu Thr Arg  
1 5 10 15

Ala Phe Leu Glu Leu Lys Leu Ser Thr Lys Arg Trp Thr Glu Lys Thr  
20 25 30

Ala Glu Thr Met Gly Pro Pro Ser Ala Pro Pro Cys Arg Leu His Val  
35 40 45

Pro Trp Lys Glu Val Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn  
50 55 60

Pro Pro Thr Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val

1140

65		70		75		80
Ala	Glu	Gly	Lys	Glu	Val	Leu
		85		90		95
Arg	Ile	Gly	Tyr	Ser	Trp	Tyr
		100		105		110
Leu	Ile	Val	Gly	Tyr	Val	Ile
		115		120		125
Ala	Tyr	Ser	Gly	Arg	Glu	Thr
		130		135		140
Gln	Asn	Val	Thr	Gln	Asn	Asp
		145		150		155
Lys	Ser	Asp	Leu	Val	Asn	Glu
		165		170		175
Pro	Glu	Leu	Pro	Lys	Pro	Ser
		180		185		190
Glu	Xaa	Lys	Asp	Ala	Val	Ala
		195		200		205
Thr	Thr	Tyr	Leu	Trp	Trp	Val
		210		215		220
Arg	Leu	Gln	Leu	Ser	Asn	Gly
		225		230		235
Lys	Arg	Asn	Asp	Ala	Gly	Ser
		245		250		255
Ser	Ala	Asn	Arg	Ser	Asp	Pro
		260		265		270
Asp	Gly	Pro	Thr	Ile	Ser	Pro
		275		280		285
Asn	Leu	Asn	Leu	Ser	Cys	His
		290		295		300
Ser	Trp	Phe	Xaa	Asn	Gly	Thr
		305		310		315
Ile	Pro	Asn	Ile	Thr	Val	Asn
		325		330		335
His	Asn	Ser	Asp	Thr	Gly	Leu

1141

340	345	350
Val Tyr Ala Glu Pro Pro Lys Pro Phe Ile Thr Ser Asn Asn Ser Asn		
355	360	365
Pro Val Glu Asp Glu Asp Ala Val Ala Leu Thr Cys Glu Pro Glu Ile		
370	375	380
Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val		
385	390	400
Ser Pro Arg Leu Gln Leu Ser Asn Asp Asn Arg Thr Leu Thr Leu Leu		
405	410	415
Ser Val Thr Arg Asn Asp Val Gly Pro Tyr Glu Cys Gly Ile Gln Asn		
420	425	430
Glu Leu Ser Val Asp His Ser Asp Pro Val Ile Leu Asn Val Leu Tyr		
435	440	445
Gly Pro Asp Asp Pro Thr Ile Ser Pro Ser Tyr Thr Tyr Tyr Arg Pro		
450	455	460
Gly Val Asn Leu Ser Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala		
465	470	475
Gln Tyr Ser Trp Leu Ile Asp Gly Asn Ile Gln Gln His Thr Gln Glu		
485	490	495
Leu Phe Ile Ser Asn Ile Thr Glu Lys Asn Ser Gly Leu Tyr Thr Cys		
500	505	510
Gln Ala Asn Asn Ser Ala Ser Gly His Ser Arg Thr Thr Val Lys Thr		
515	520	525
Ile Thr Val Ser Ala Xaa Xaa Pro Lys Pro Ser Ile Ser Ser Asn Asn		
530	535	540
Ser Lys Pro Val Glu Asp Lys Asp Ala Val Ala Phe Thr Cys Glu Pro		
545	550	555
Glu Ala Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Gly Gln Ser Leu		
565	570	575
Pro Val Ser Pro Arg Leu Gln Leu Ser Asn Gly Asn Arg Thr Leu Thr		
580	585	590
Leu Phe Asn Val Thr Arg Asn Asp Ala Arg Ala Tyr Val Cys Gly Ile		
595	600	605
Gln Asn Ser Val Ser Ala Asn Arg Ser Asp Pro Val Thr Leu Asp Val		

1142

610	615	620
Leu Tyr Gly Pro Asp Thr Pro Ile Ile Ser Pro Pro Asp Ser Ser Tyr		
625	630	635 640
Leu Ser Gly Ala Asn Leu Asn Leu Ser Cys His Ser Ala Ser Asn Pro		
	645	650 655
Ser Pro Gln Tyr Ser Trp Arg Ile Asn Gly Ile Pro Gln Gln His Thr		
	660	665 670
Gln Val Leu Phe Ile Ala Lys Ile Thr Pro Asn Asn Asn Gly Thr Tyr		
	675	680 685
Ala Cys Phe Val Ser Asn Leu Ala Thr Gly Arg Asn Asn Ser Ile Val		
	690	695 700
Lys Ser Ile Thr Val Ser Ala Ser Gly Thr Ser Pro Gly Leu Ser Ala		
	705	710 715 720
Gly Ala Thr Val Gly Ile Met Ile Gly Val Leu Val Gly Val Ala Leu		
	725	730 735
Ile		

&lt;210&gt; 1134

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1134

Phe Gly Thr Xaa Arg Ser Val Val Leu Leu Val Ala Val Arg Leu
1 5 10 15

His Thr Leu Leu Ser Cys Pro Leu Glu Gln Pro Ala Gly Thr Glu Trp
20 25 30

Ile Leu Glu Glu Gly Val Thr Thr Gly Pro Pro Arg Lys Pro Arg Ala
35 40 45

Asp Ile Tyr Asn Leu Arg Ser Pro Asp Glu Phe Ile Val Gly Gln Asn
50 55 60



1143

Gln Ala Leu Ile Glu Pro Gly  
65 70

&lt;210&gt; 1135

&lt;211&gt; 244

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (101)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1135

Gly Leu Arg Arg Leu Asp Ser Ala Ser Gly Thr Val Tyr Thr Ala Met  
1 5 10 15

Asp Val Ala Thr Gly Gln Glu Val Ala Ile Lys Gln Met Asn Leu Gln  
20 25 30

Gln Gln Pro Lys Lys Glu Leu Ile Ile Asn Glu Ile Leu Val Met Arg  
35 40 45

Glu Asn Lys Asn Pro Asn Ile Val Asn Tyr Leu Asp Ser Tyr Leu Val  
50 55 60

Gly Asp Glu Leu Trp Val Val Met Glu Tyr Leu Ala Gly Gly Ser Leu  
65 70 75 80

Thr Asp Val Val Thr Glu Thr Cys Met Asp Glu Gly Gln Ile Ala Ala  
85 90 95

Val Cys Arg Glu Xaa Leu Gln Ala Leu Glu Phe Leu His Ser Asn Gln  
100 105 110

Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr Pro Tyr  
115 120 125

Trp Met Ala Pro Glu Val Val Thr Arg Lys Ala Tyr Gly Pro Lys Val  
130 135 140

Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Ile Glu Gly Glu  
145 150 155 160

Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu Ile Ala  
165 170 175

Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser Ala Ile  
180 185 190

1144

Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu Lys Arg  
 195 200 205

Gly Ser Ala Lys Glu Leu Leu Gln His Gln Phe Leu Lys Ile Ala Lys  
 210 215 220

Pro Leu Ser Ser Leu Thr Pro Leu Ile Ala Ala Ala Lys Glu Ala Thr  
 225 230 235 240

Lys Asn Asn His

<210> 1136

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1136

Arg Ala Glu Phe Gly Thr Ser Pro Arg Ala Arg Arg His Glu Cys Cys  
 1 5 10 15

Arg Phe Leu Asp Asp Asn Gln Ile Ile Thr Ser Ser Gly Asp Thr Thr  
 20 25 30

Cys Ala Leu Trp Asp Ile Glu Thr Gly Gln Gln Thr Val Gly Phe Ala  
 35 40 45

Gly His Ser Gly Asp Val Met Ser Leu Ser Leu Ala Pro Asp Gly Arg  
 50 55 60

Thr Phe Val Ser Gly Ala Cys Asp Ala Ser Ile Lys Leu Trp Asp Val  
 65 70 75 80

Arg Asp Ser Met Cys Arg Gln Thr Phe Ile Gly His Glu Ser Asp Ile  
 85 90 95

Asn Ala Val Ala Phe Phe Pro Asn Gly Tyr Ala Phe Thr Thr Gly Ser  
 100 105 110

Asp Asp Ala Thr Cys Arg Leu Phe Asp Leu Arg Ala Asp Gln Glu Leu  
 115 120 125

Leu Met Tyr Ser His Asp Asn Ile Ile Cys Gly Ile Thr Ser Val Ala  
 130 135 140

Phe Ser Arg Ser Asp Gly Cys Cys Ser Leu Ala Thr Thr Thr Ser Thr  
 145 150 155 160

1145

Ala Thr Ser Gly Met Pro  
165

&lt;210&gt; 1137

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 1137  
Thr Asn Asn Lys Ser Leu Val Gln Leu Lys His Ile Ser Asn Asp Phe  
1 5 10 15  
Ser Lys Phe Lys Val Asp His Asp Arg Ile Ile Lys Asp Arg Lys Asp  
20 25 30  
Leu Ser Asn Leu Val Met Thr Ile Ile Ser Ile Phe Ala Glu Leu Lys  
35 40 45  
Ile Phe Asn Phe Ile Asn Met Leu Leu Gln Leu Pro Asp Leu Lys Lys  
50 55 60  
Lys Ser Phe Pro His Ser Gln Leu Lys Val Arg Thr Leu His Phe  
65 70 75

&lt;210&gt; 1138

&lt;211&gt; 397

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1138

Pro Thr Arg Pro Ser Ser Val Ser Arg Arg Asp Lys Ser Lys Gln Val  
1 5 10 15  
Trp Glu Ala Val Leu Leu Pro Leu Ser Leu Leu Ser Met Met Asp Leu  
20 25 30  
Arg Asn Thr Pro Ala Lys Ser Leu Asp Lys Phe Ile Glu Asp Tyr Leu  
35 40 45  
Leu Pro Asp Thr Cys Phe Arg Met Gln Ile Asn His Ala Ile Asp Ile  
50 55 60  
Ile Cys Gly Phe Leu Lys Glu Arg Cys Phe Arg Gly Ser Ser Tyr Pro  
65 70 75 80  
Val Cys Val Ser Lys Val Val Lys Gly Gly Ser Ser Gly Lys Gly Thr  
85 90 95

1146

Thr Leu Arg Gly Arg Ser Asp Ala Asp Leu Val Val Phe Leu Ser Pro  
 100 105 110

Leu Thr Thr Phe Gln Asp Gln Leu Asn Arg Arg Gly Glu Phe Ile Gln  
 115 120 125

Glu Ile Arg Arg Gln Leu Glu Ala Cys Gln Arg Glu Arg Ala Phe Ser  
 130 135 140

Val Lys Phe Glu Val Gln Ala Pro Arg Trp Gly Asn Pro Arg Ala Leu  
 145 150 155 160

Ser Phe Val Leu Ser Ser Leu Gln Leu Gly Glu Gly Val Glu Phe Asp  
 165 170 175

Val Leu Pro Ala Phe Asp Ala Leu Asp Phe Ala Arg Thr Gly Gln Leu  
 180 185 190

Thr Gly Gly Tyr Lys Pro Asn Pro Gln Ile Tyr Val Lys Leu Ile Glu  
 195 200 205

Glu Cys Thr Asp Leu Gln Lys Glu Gly Glu Phe Ser Thr Cys Phe Thr  
 210 215 220

Glu Leu Gln Arg Asp Phe Leu Lys Gln Arg Pro Thr Lys Leu Lys Ser  
 225 230 235 240

Leu Ile Arg Leu Val Lys His Trp Tyr Gln Asn Cys Lys Lys Lys Leu  
 245 250 255

Gly Lys Leu Pro Pro Gln Tyr Ala Leu Glu Leu Leu Thr Val Tyr Ala  
 260 265 270

Trp Glu Arg Gly Ser Met Lys Thr His Phe Asn Thr Ala Gln Gly Phe  
 275 280 285

Arg Thr Val Leu Glu Leu Val Ile Asn Tyr Gln Gln Leu Cys Ile Tyr  
 290 295 300

Trp Thr Lys Tyr Tyr Asp Phe Lys Asn Pro Ile Ile Glu Lys Tyr Leu  
 305 310 315 320

Arg Arg Gln Leu Thr Lys Pro Arg Pro Val Ile Leu Asp Pro Ala Asp  
 325 330 335

Pro Thr Gly Asn Leu Gly Gly Gly Asp Pro Lys Gly Trp Arg Gln Leu  
 340 345 350

Ala Gln Glu Ala Glu Ala Trp Leu Asn Tyr Pro Cys Phe Lys Asn Trp  
 355 360 365

1147

Asp Gly Ser Pro Val Ser Ser Trp Ile Leu Leu Val Arg Pro Pro Ala  
 370 375 380

Ser Ser Leu Pro Phe Ile Pro Ala Pro Leu His Glu Ala  
 385 390 395

<210> 1139

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1139

Phe Leu Leu Ser Asn Ala Arg Trp Ser Asn Arg Pro Asp Thr Ala Thr  
 1 5 10 15

Ala Leu Ala Gly Gly Ala Val Met Pro Glu Leu Ile Leu Ser Pro Ala  
 20 25 30

Thr Ala Pro His Pro Leu Lys Met Phe Ala Cys Ser Lys Phe Val Ser  
 35 40 45

Thr Pro Ser Leu Val Lys Ser Thr Ser Gln Leu Leu Ser Arg Pro Leu  
 50 55 60

Ser Ala Val Val Leu Lys Arg Pro Glu Ile Leu Thr Asp Glu Ser Leu  
 65 70 75 80

Ser Ser Leu Ala Val Ser Cys Pro Leu Thr Ser Leu Val Ser Ser Arg  
 85 90 95

Ser Phe Gln Thr Ser Ala Ile Ser Arg Asp Ile Asp Thr Ala Ala Lys  
 100 105 110

Phe Ile Gly Ala Gly Ala Ala Thr Val Gly Val Ala Gly Ser Gly Ala  
 115 120 125

Gly Ile Gly Thr Val Phe Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn  
 130 135 140

Pro Ser Leu Lys Gln Gln Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala  
 145 150 155 160

Leu Ser Glu Ala Met Gly Leu Phe Cys Leu Met Val Ala Phe Leu Ile  
 165 170 175

Leu Phe Ala Met  
 180

1148

&lt;210&gt; 1140

&lt;211&gt; 484

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1140

Trp Leu Leu Arg Ser Pro Gly Lys Leu Thr Ala Arg Glu Arg Ile Ser  
 1 5 10 15

Leu Leu Leu Asp Pro Gly Ser Phe Xaa Glu Ser Asp Met Phe Val Glu  
 20 25 30

His Arg Cys Ala Asp Phe Gly Met Ala Ala Asp Lys Asn Lys Phe Pro  
 35 40 45

Gly Asp Ser Val Val Thr Gly Arg Gly Arg Ile Asn Gly Arg Leu Val  
 50 55 60

Tyr Val Phe Ser Gln Asp Phe Thr Val Phe Gly Gly Ser Leu Ser Gly  
 65 70 75 80

Ala His Ala Gln Lys Ile Cys Lys Ile Met Asp Gln Ala Ile Thr Val  
 85 90 95

Gly Ala Pro Val Ile Gly Leu Asn Asp Ser Gly Gly Ala Arg Ile Gln  
 100 105 110

Glu Gly Val Glu Ser Leu Ala Gly Tyr Ala Asp Ile Phe Leu Arg Asn  
 115 120 125

Val Thr Ala Ser Gly Val Ile Pro Gln Ile Ser Leu Ile Met Gly Pro  
 130 135 140

Cys Ala Gly Gly Ala Val Tyr Ser Pro Ala Leu Thr Asp Phe Thr Phe  
 145 150 155 160

Met Val Lys Asp Thr Ser Tyr Leu Phe Ile Thr Gly Pro Asp Val Val  
 165 170 175

Lys Ser Val Thr Asn Glu Asp Val Thr Gln Glu Glu Leu Gly Gly Ala  
 180 185 190

Lys Thr His Thr Thr Met Ser Gly Val Ala His Arg Ala Phe Glu Asn  
 195 200 205

Asp Val Asp Ala Leu Cys Asn Leu Arg Asp Phe Phe Asn Tyr Leu Pro  
 210 215 220  
 Leu Ser Ser Gln Asp Pro Ala Pro Val Arg Glu Cys His Asp Pro Ser  
 225 230 235 240  
 Asp Arg Leu Val Pro Glu Leu Asp Thr Ile Val Pro Leu Glu Ser Thr  
 245 250 255  
 Lys Ala Tyr Asn Met Val Asp Ile Ile His Ser Val Val Asp Glu Arg  
 260 265 270  
 Glu Phe Phe Glu Ile Met Pro Asn Tyr Ala Lys Asn Ile Ile Val Gly  
 275 280 285  
 Phe Ala Arg Met Asn Gly Arg Thr Val Gly Ile Val Gly Asn Gln Pro  
 290 295 300  
 Lys Val Ala Ser Gly Cys Leu Asp Ile Asn Ser Ser Val Lys Gly Ala  
 305 310 315 320  
 Arg Phe Val Arg Phe Cys Asp Ala Phe Asn Ile Pro Leu Ile Thr Phe  
 325 330 335  
 Val Asp Val Pro Gly Phe Leu Pro Gly Thr Ala Gln Glu Tyr Gly Gly  
 340 345 350  
 Ile Ile Arg His Gly Ala Lys Leu Leu Tyr Ala Phe Ala Glu Ala Thr  
 355 360 365  
 Val Pro Lys Val Thr Val Ile Thr Arg Lys Ala Tyr Gly Gly Ala Tyr  
 370 375 380  
 Asp Val Met Ser Ser Lys His Leu Cys Gly Asp Thr Asn Tyr Ala Trp  
 385 390 395 400  
 Pro Thr Ala Glu Ile Ala Val Met Gly Ala Lys Gly Ala Val Glu Ile  
 405 410 415  
 Ile Phe Lys Gly His Glu Asn Val Glu Ala Ala Gln Ala Glu Tyr Ile  
 420 425 430  
 Glu Lys Phe Ala Asn Pro Phe Pro Ala Ala Val Arg Gly Phe Val Asp  
 435 440 445  
 Asp Ile Ile Gln Pro Ser Ser Thr Arg Ala Arg Ile Cys Cys Asp Leu  
 450 455 460  
 Asp Val Leu Ala Ser Lys Lys Val Gln Arg Pro Trp Arg Lys His Ala  
 465 470 475 480

1150

Asn Ile Pro Leu

&lt;210&gt; 1141

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (53)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (54)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1141

Leu	Xaa	Glu	Leu	Glu	Arg	Tyr	Val	Thr	Ser	Cys	Leu	Arg	Lys	Lys	Arg
1				5					10					15	

Lys	Pro	Gln	Ala	Glu	Lys	Val	Asp	Val	Ile	Ala	Gly	Ser	Ser	Lys	Met
		20					25							30	

Lys	Gly	Phe	Ser	Ser	Ser	Glu	Ser	Glu	Ser	Ser	Ser	Glu	Ser	Ser	Ser
		35					40						45		

Ser	Asp	Ser	Glu	Xaa	Xaa	Glu	Thr	Gly	Pro	Ala
		50					55			

&lt;210&gt; 1142

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1142

Ser	Gly	Tyr	Lys	Thr	Ile	Ser	Ala	Met	Gln	Thr	Ile	Lys	Cys	Val	Val
1				5					10					15	

Val	Gly	Asp	Gly	Ala	Val	Gly	Lys	Thr	Cys	Leu	Leu	Ile	Ser	Tyr	Thr
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



1151

20 25 30  
 Thr Asn Lys Phe Pro Ser Glu Tyr Val Pro Thr Val Phe Asp Asn Tyr  
 35 40 45  
 Ala Val Thr Val Met Ile Gly Gly Glu Pro Tyr Thr Leu Gly Leu Phe  
 50 55 60  
 Asp Thr Ala Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr  
 65 70 75 80  
 Pro Gln Thr Asp Val Phe Leu Val Cys Phe Ser Val Val Ser Pro Ser  
 85 90 95  
 Ser Phe Glu Asn Val Lys Glu Lys Trp Val Pro Glu Ile Thr His His  
 100 105 110  
 Cys Pro Lys Thr Pro Phe Leu Leu Val Gly Thr Gln Ile Asp Leu Arg  
 115 120 125  
 Asp Asp Pro Ser Thr Ile Glu Lys Leu Ala Lys Asn Lys Gln Lys Pro  
 130 135 140  
 Ile Thr Pro Glu Thr Ala Glu Lys Leu Ala Arg Asp Leu Lys Ala Val  
 145 150 155 160  
 Lys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Asn Val  
 165 170 175  
 Phe Asp Glu Ala Ile Leu Ala Ala Leu Glu Pro Pro Glu Pro Lys Lys  
 180 185 190  
 Ser Arg Arg Cys Val Leu Leu  
 195

<210> 1143  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

<400> 1143  
 Gly Asp Leu Asp Cys Pro Asp Trp Val Leu Ala Glu Ile Ser Thr Leu  
 1 5 10 15  
 Ala Lys Met Tyr Glu Lys Ile Leu Lys Leu Thr Ala Asp Ala Lys Phe  
 20 25 30  
 Glu Ser Gly Asp Val Lys Ala Thr Val Ala Val Leu Ser Phe Ile Leu  
 35 40 45

1152

Ser Ser Ala Ala Lys His Ser Val Asp Gly Glu Ser Leu Ser Ser Glu  
50 55 60

Leu Gln Gln Leu Gly Leu Pro Lys Glu His Ala Ala Ser Leu Cys Arg  
65 70 75 80

Cys Tyr Glu Glu Lys Gln Ser Pro Leu Gln Lys His Leu Arg Val Cys  
85 90 95

Ser Leu Arg Met Asn Arg Leu Ala Gly Val Gly Trp Arg Val Asp Tyr  
100 105 110

Thr Leu Ser Ser Ser Leu Leu Gln Ser Val Glu Glu Pro Met Val His  
115 120 125

Leu Arg Leu Glu Val Ala Ala Ala Pro Gly Thr Pro Ala Gln Pro Val  
130 135 140

Ala Met Ser Leu Ser Ala Asp Lys Phe Gln Val Leu Leu Ala Glu Leu  
145 150 155 160

Lys Gln Ala Gln Thr Leu Met Ser Ser Leu Gly  
165 170

&lt;210&gt; 1144

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1144

Gln Trp Arg Gln Gly Val Gln Gly Arg Ser Ala Ser Gly Thr Ser Thr  
1 5 10 15

1153

Cys Arg Val Ala Arg Xaa Gly Gln Asp Trp Pro Ala Ala Ser Pro Gly  
                   20                                  25                                  30  
 Val Asn Leu Arg Asn Xaa Phe Xaa Pro Pro Leu Leu Leu Ala Pro Val  
                   35                                  40                                  45  
 Pro Thr Pro Val Ala Pro Ser Leu Gly Ser Pro Leu Leu Leu Ser His  
                   50                                  55                                  60  
 Pro Glu Arg Gln Ser Gly Pro Val Thr Gly Gly Ala Gly Glu Gly His  
                   65                                  70                                  75                                  80  
 Arg Cys Ala Ser Pro Gln Thr Val Cys Gln Val Ser Glu Leu Val Thr  
                                   85                                  90                                  95  
 Arg Pro Ala Ala Gln Pro Ser Ala Ala Ala Gln Pro Ala Ala Pro Ala  
                   100                                  105                                  110  
 Gly Gly Arg Thr Pro Gly Arg Ala Gly Pro His Leu Pro Ile Tyr Lys  
                   115                                  120                                  125  
 Ile Gly Gln Gly Asn Met Lys Ala Asp Leu Gln Ala Ala Ala Thr Ala  
                   130                                  135                                  140  
 Lys Pro Gly Lys Ser Gln Gln  
                   145                                  150

&lt;210&gt; 1145

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1145

Ala Asp Ile Ala Gly Val Leu Ala Ile Arg Pro Asp Glu Leu Arg Phe  
                   1                                  5                                  10                                  15  
 Arg Tyr Ser Met Val Ala Tyr Trp Arg Gln Ala Gly Leu Ser Tyr Ile  
                   20                                  25                                  30  
 Arg Tyr Ser Gln Ile Cys Ala Lys Ala Val Arg Asp Ala Leu Lys Thr  
                   35                                  40                                  45  
 Glu Phe Lys Ala Asn Ala Glu Lys Thr Ser Gly Ser Asn Val Lys Ile  
                   50                                  55                                  60  
 Val Lys Val Lys Lys Glu  
                   65                                  70

1154

&lt;210&gt; 1146

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1146

Leu His Ala Asn Gln Val Ile His Arg Asp Ile Lys Ser Asp Asn Val  
 1 5 10 15

Leu Leu Gly Met Glu Gly Ser Val Lys Leu Thr Asp Phe Gly Phe Cys  
 20 25 30

Ala Gln Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr  
 35 40 45

Pro Tyr Trp Met Ala Pro Glu Xaa Val Thr Arg Lys Ala Tyr Gly Pro  
 50 55 60

Lys Val Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Val Glu  
 65 70 75 80

Gly Glu Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu  
 85 90 95

Ile Ala Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser  
 100 105 110

Pro Ile Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu  
 115 120 125

Lys Arg Gly Ser Ala Lys Glu Leu Leu Gln His Pro Phe Leu Lys Leu  
 130 135 140

Ala Lys Pro Leu Ser Ser Leu Thr Pro Leu Ile Met Ala Ala Lys Glu  
 145 150 155 160

Ala Met Lys Ser Asn Arg  
 165

&lt;210&gt; 1147

&lt;211&gt; 420

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

1155

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (203)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1147

Cys Pro Pro Phe Ser Val Arg Val Pro Pro Trp Ala Gly Leu Ala Leu  
 1 5 10 15  
 Leu Pro Ser Pro Ser Leu Met Ala Leu Leu Arg Arg Pro Thr Val Ser  
 20 25 30  
 Ser Asp Leu Glu Asn Ile Asp Thr Gly Val Asn Ser Lys Val Lys Ser  
 35 40 45  
 His Val Thr Ile Arg Arg Thr Val Leu Glu Glu Ile Gly Asn Arg Val  
 50 55 60  
 Thr Thr Arg Ala Ala Gln Val Ala Lys Lys Ala Gln Asn Thr Lys Val  
 65 70 75 80  
 Pro Val Gln Pro Thr Lys Thr Thr Asn Val Asn Lys Gln Leu Lys Pro  
 85 90 95  
 Thr Ala Ser Val Lys Pro Val Gln Met Glu Lys Leu Ala Pro Lys Gly  
 100 105 110  
 Pro Ser Pro Thr Pro Glu Asp Val Ser Met Lys Glu Glu Asn Leu Cys  
 115 120 125  
 Gln Ala Phe Ser Asp Ala Leu Leu Cys Lys Ile Glu Asp Ile Asp Asn  
 130 135 140  
 Glu Asp Trp Glu Asn Pro Gln Leu Cys Ser Asp Tyr Val Lys Asp Ile  
 145 150 155 160  
 Tyr Gln Tyr Leu Arg Gln Leu Glu Val Leu Gln Ser Ile Asn Pro His  
 165 170 175  
 Phe Leu Asp Gly Arg Asp Ile Asn Gly Arg Met Arg Ala Ile Leu Val  
 180 185 190  
 Asp Trp Leu Val Gln Val His Ser Lys Phe Xaa Leu Leu Gln Glu Thr  
 195 200 205  
 Leu Tyr Met Cys Val Gly Ile Met Asp Arg Phe Leu Gln Val Gln Pro  
 210 215 220  
 Val Ser Arg Lys Lys Leu Gln Leu Val Gly Ile Thr Ala Leu Leu Leu  
 225 230 235 240

1156

Ala Ser Lys Tyr Glu Glu Met Phe Ser Pro Asn Ile Glu Asp Phe Val  
 245 250 255  
 Tyr Ile Thr Asp Asn Ala Tyr Thr Ser Ser Gln Ile Arg Glu Met Glu  
 260 265 270  
 Thr Leu Ile Leu Lys Glu Leu Lys Phe Glu Leu Gly Arg Pro Leu Pro  
 275 280 285  
 Leu His Phe Leu Arg Arg Ala Ser Lys Ala Gly Glu Val Asp Val Glu  
 290 295 300  
 Gln His Thr Leu Ala Lys Tyr Leu Met Glu Leu Thr Leu Ile Asp Tyr  
 305 310 315 320  
 Asp Met Val His Tyr His Pro Ser Lys Val Ala Ala Ala Ala Ser Cys  
 325 330 335  
 Leu Ser Gln Lys Val Leu Gly Gln Gly Lys Trp Asn Leu Lys Gln Gln  
 340 345 350  
 Tyr Tyr Thr Gly Tyr Thr Glu Asn Glu Val Leu Glu Val Met Gln His  
 355 360 365  
 Met Ala Lys Asn Val Val Lys Val Asn Glu Asn Leu Thr Lys Phe Ile  
 370 375 380  
 Ala Ile Lys Asn Lys Tyr Ala Ser Ser Lys Leu Leu Lys Ile Ser Met  
 385 390 395 400  
 Ile Pro Gln Leu Asn Ser Lys Ala Val Lys Asp Leu Ala Ser Pro Leu  
 405 410 415  
 Ile Gly Arg Ser  
 420

&lt;210&gt; 1148

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (244)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1148

Gln Ser Asn Ala Val Trp Leu Leu Gly His Leu His Leu Ser Thr Leu

1157

1	5	10	15
Ser Ser Ser Gln Ser Arg Ala Ser Val Pro Thr Asp Tyr Ser Tyr Leu	20	25	30
Pro Glu Ser Ser Phe Ile Gly Ala Ala Ile Gly Phe Phe Ile Thr Gly	35	40	45
Gly Lys Lys Gly Pro Glu Ser Val Pro Pro Ser Leu Leu Lys Val Val	50	55	60
Met Lys Pro Ile Ala Thr Val Gly Glu Ser Tyr Gln Tyr Pro Pro Val	65	70	75
Asn Trp Ala Ala Leu Leu Ser Pro Leu Met Arg Leu Asn Phe Gly Glu	85	90	95
Glu Ile Gln Gln Leu Cys Leu Glu Ile Met Val Thr Gln Ala Gln Ser	100	105	110
Ser Gln Asn Ala Ala Ala Leu Leu Gly Leu Trp Val Thr Pro Pro Leu	115	120	125
Ile His Ser Leu Ser Leu Asn Thr Lys Arg Tyr Leu Leu Ile Ser Ala	130	135	140
Pro Leu Trp Ile Lys His Ile Ser Asp Glu Gln Ile Leu Gly Phe Val	145	150	155
Glu Asn Leu Met Val Ala Val Phe Lys Ala Ala Ser Pro Leu Gly Ser	165	170	175
Pro Glu Leu Cys Pro Ser Ala Leu His Gly Leu Ser Gln Ala Met Lys	180	185	190
Leu Pro Ser Pro Ala His His Leu Trp Ser Leu Leu Ser Glu Ala Thr	195	200	205
Gly Lys Ile Phe Asp Leu Leu Pro Asn Lys Ile Arg Arg Lys Asp Leu	210	215	220
Glu Leu Tyr Ile Ser Ile Ala Lys Cys Leu Leu Glu Met Thr Asp Asp	225	230	235
Asp Ala Asn Xaa Asp Arg Pro Gly Tyr	245		

&lt;210&gt; 1149

&lt;211&gt; 239

1158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1149

Arg Asp Pro Pro Arg Pro Val Gln Ser Gly Leu Gly Ala Ala Gly Thr  
 1 5 10 15

Leu Ser Trp Leu Pro Pro Pro Glu Gln Pro Val Leu Val Pro Arg Leu  
 20 25 30

Pro Ala Pro Arg Pro Val Met Thr Leu Arg Pro Ser Leu Leu Pro Leu  
 35 40 45

His Leu Leu Leu Leu Leu Leu Ser Ala Ala Val Cys Arg Ala Glu  
 50 55 60

Ala Gly Leu Glu Thr Glu Ser Pro Val Arg Thr Leu Gln Val Glu Thr  
 65 70 75 80

Leu Val Glu Pro Pro Glu Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp  
 85 90 95

Thr Leu His Ile His Tyr Thr Gly Ser Leu Val Asp Gly Arg Ile Ile  
 100 105 110

Asp Thr Ser Leu Thr Arg Asp Pro Leu Val Ile Glu Leu Gly Gln Lys  
 115 120 125

Gln Val Ile Pro Gly Leu Glu Gln Ser Leu Leu Asp Met Cys Val Gly  
 130 135 140

Glu Lys Arg Arg Ala Ile Ile Pro Ser His Leu Ala Tyr Gly Lys Arg  
 145 150 155 160

Gly Phe Pro Pro Ser Val Pro Ala Asp Ala Val Val Gln Tyr Asp Val  
 165 170 175

Glu Leu Ile Ala Leu Ile Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys  
 180 185 190

Gly Ile Leu Pro Leu Val Gly Met Ala Met Val Pro Ala Leu Leu Gly  
 195 200 205

Leu Ile Gly Tyr His Leu Tyr Arg Lys Ala Asn Arg Pro Lys Val Ser  
 210 215 220

Lys Lys Lys Leu Lys Glu Glu Lys Arg Asn Lys Ser Lys Lys Lys  
 225 230 235



1159

&lt;210&gt; 1150

&lt;211&gt; 394

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1150

Ala Glu Xaa Gly Lys Thr Glu Trp Leu Phe Gly Met Asp Glu Gly Arg  
 1 5 10 15

Lys Gln Leu Ala Ala Ser Ala Gly Phe Arg Arg Leu Ile Thr Val Ala  
 20 25 30

Leu His Arg Gly Gln Gln Tyr Glu Ser Met Asp His Ile Gln Ala Glu  
 35 40 45

Leu Ser Ala Arg Val Met Glu Leu Ala Pro Ala Gly Met Pro Thr Gln  
 50 55 60

Gln Gln Val Pro Phe Leu Ser Val Gly Gly Asp Ile Gly Val Arg Thr  
 65 70 75 80

Val Gln His Gln Asp Cys Ser Pro Leu Ser Gly Asp Tyr Val Ile Glu  
 85 90 95

Asp Val Gln Gly Asp Asp Lys Arg Tyr Phe Arg Arg Leu Ile Phe Leu  
 100 105 110

Ser Asn Arg Asn Val Val Gln Ser Glu Ala Arg Leu Leu Lys Asp Val  
 115 120 125

Ser His Lys Ala Gln Lys Lys Arg Lys Lys Asp Arg Lys Lys Gln Arg  
 130 135 140

Pro Ala Asp Ala Glu Asp Leu Pro Ala Ala Pro Gly Gln Ser Ile Asp  
 145 150 155 160

Lys Ser Tyr Leu Cys Cys Glu His His Lys Ala Met Ile Ala Gly Leu  
 165 170 175

Ala Leu Leu Arg Asn Pro Glu Leu Leu Leu Glu Ile Pro Leu Ala Leu  
 180 185 190

Leu Val Val Gly Leu Gly Gly Gly Ser Leu Pro Leu Phe Val His Asp  
 195 200 205

His Phe Pro Lys Ser Cys Ile Asp Ala Val Glu Ile Asp Pro Ser Met

1160

210	215	220
Leu Glu Val Ala Thr Gln Trp Phe Gly Phe Ser Gln Ser Asp Arg Met		
225	230	235 240
Lys Val His Ile Ala Asp Gly Leu Asp Tyr Ile Ala Ser Leu Ala Gly		
	245	250 255
Gly Gly Glu Ala Arg Pro Cys Tyr Asp Val Ile Met Phe Asp Val Asp		
	260	265 270
Ser Lys Asp Pro Thr Leu Gly Met Ser Cys Pro Pro Pro Ala Phe Val		
	275	280 285
Glu Gln Ser Phe Leu Gln Lys Val Lys Ser Ile Leu Thr Pro Glu Gly		
	290	295 300
Val Phe Ile Leu Asn Leu Val Cys Arg Asp Leu Gly Leu Lys Asp Ser		
	305	310 315 320
Val Leu Ala Gly Leu Lys Ala Val Phe Pro Leu Leu Tyr Val Arg Arg		
	325	330 335
Ile Glu Gly Glu Val Asn Glu Ile Leu Phe Cys Gln Leu His Pro Glu		
	340	345 350
Gln Lys Leu Ala Thr Pro Glu Leu Leu Glu Thr Ala Gln Ala Leu Glu		
	355	360 365
Arg Thr Leu Arg Lys Pro Gly Arg Gly Trp Asp Asp Thr Tyr Val Leu		
	370	375 380
Ser Asp Met Leu Lys Thr Val Lys Ile Val		
	385	390

&lt;210&gt; 1151

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1151

Val Asn Val Asn Asn Pro Ser Leu Cys His Ser Ser His Leu Val Asp
1 5 10 15
Leu Gly Ser Gly Ser Val Glu Phe Cys Ala Trp Glu Trp Ser Trp Arg
20 25 30
Glu Trp Gly Leu Cys Thr Ala Ala Thr Ser Pro Arg Ser Ser His Leu
35 40 45

1161

Pro Ala Pro Arg Pro Gly Cys Met Ala Ala Pro Val Cys Val Gln Arg  
 50 55 60

Ser Val Ser His Pro Leu His Leu Leu Ser Gly Gly Leu Gly Ser Pro  
 65 70 75 80

Thr Cys Cys Gln Asp Leu Gly Ala Ile Lys Tyr Ser Gly Phe Val Lys  
 85 90 95

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 100 105 110

<210> 1152  
 <211> 172  
 <212> PRT  
 <213> Homo sapiens

<400> 1152  
 Leu Gly Asp Thr Ile Glu Gly Arg Leu Gln Val Pro Val Arg Asn Ser  
 1 5 10 15

Arg Val Asp Pro Arg Val Arg Ala Arg Gly Ala Asp Arg Met Gly Lys  
 20 25 30

Cys Arg Gly Leu Arg Thr Ala Arg Lys Leu Arg Ser His Arg Arg Asp  
 35 40 45

Gln Lys Trp His Asp Lys Gln Tyr Lys Lys Ala His Leu Gly Thr Ala  
 50 55 60

Leu Lys Ala Asn Pro Phe Gly Gly Ala Ser His Ala Lys Gly Ile Val  
 65 70 75 80

Leu Glu Lys Val Gly Val Glu Ala Lys Gln Pro Asn Ser Ala Ile Arg  
 85 90 95

Lys Cys Val Arg Val Gln Leu Ile Lys Asn Gly Lys Lys Ile Thr Ala  
 100 105 110

Phe Val Pro Asn Asp Gly Cys Leu Asn Phe Ile Glu Glu Asn Asp Glu  
 115 120 125

Val Leu Val Ala Gly Phe Gly Arg Lys Gly His Ala Val Gly Asp Ile  
 130 135 140

Pro Gly Val Arg Phe Lys Val Val Lys Val Ala Asn Val Ser Leu Leu  
 145 150 155 160

1162

Ala Leu Tyr Lys Gly Lys Lys Glu Arg Pro Arg Ser  
 165 170

&lt;210&gt; 1153

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1153

Tyr Trp Cys Glu Gln Cys Asp Val Gln Phe Ser Ser Ser Ser Glu Leu  
 1 5 10 15

Tyr Leu His Phe Gln Glu His Ser Cys Asp Glu Gln Tyr Leu Cys Gln  
 20 25 30

Phe Cys Glu His Glu Thr Asn Asp Pro Glu Asp Leu His Ser His Val  
 35 40 45

Val Asn Glu His Ala Cys Lys Leu Ile Glu Leu Ser Asp Lys Tyr Asn  
 50 55 60

Asn Gly Glu His Gly Gln Tyr Ser Leu Leu Ser Lys Ile Thr Phe Asp  
 65 70 75 80

Lys Cys Lys Asn Phe Phe Val Cys Gln Val Cys Gly Phe Arg Ser Arg  
 85 90 95

Leu His Thr Asn Val Asn Arg His Val Ala Ile Glu His Thr Lys Ile  
 100 105 110

Phe Pro His Val Cys Asp Asp Cys Gly Lys Gly Phe Ser Ser Met Leu  
 115 120 125

Glu Tyr Cys Lys His Leu Asn Ser His Leu Ser Glu Gly Ile Tyr Leu  
 130 135 140

Cys Gln Tyr Cys Glu Tyr Ser Thr Gly Gln Ile Glu Asp Leu Lys Ile  
 145 150 155 160

His Leu Asp Phe Lys His Ser Ala Asp Leu Pro His Lys Cys Ser Asp  
 165 170 175

Cys Leu Met Arg Phe Gly Asn Glu Arg Glu Leu Ile Ser His Leu Pro  
 180 185 190

Val His Glu Thr Thr  
 195

1163

&lt;210&gt; 1154

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1154

Pro Ala Lys Glu Arg Arg Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser  
1 5 10 15

Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Gly  
20 25 30

Ser Ser Ser Ser Asp Ser Glu Gly Ser Ser Leu Pro Val Gln Pro Glu  
35 40 45

Val Ala Leu Lys Arg Val Pro Ser Pro Thr Pro Ala Pro Lys Glu Ala  
50 55 60

Val Arg Glu Gly Arg Pro Pro Glu Pro Thr Pro Ala Lys Arg Lys Arg  
65 70 75 80

Arg Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser  
85 90 95

Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser  
100 105 110

Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Pro Ser Pro Ala Lys  
115 120 125

Pro Gly Pro Gln Ala Cys Pro Asn Leu Gln Ala Pro Arg Ser His Pro  
130 135 140

Leu Ala Ser Gly Gly Pro Ala Ala Pro Gly Ser Gln  
145 150 155

&lt;210&gt; 1155

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

1164

&lt;222&gt; (105)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (122)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1155

Pro Glu Ala Pro Arg Gly Val Val Thr Cys Leu Arg Ala Leu Leu Ser  
 1 5 10 15

His Gln His Gln Thr Arg Pro His Arg Val Pro Gly Thr Met Phe Gly  
 20 25 30

Lys Arg Lys Lys Arg Val Glu Ile Ser Ala Pro Ser Asn Phe Glu His  
 35 40 45

Arg Val His Thr Gly Phe Asp Gln His Glu Gln Lys Phe Thr Gly Leu  
 50 55 60

Pro Arg Gln Trp Gln Ser Leu Ile Xaa Glu Ser Ala Arg Arg Pro Lys  
 65 70 75 80

Pro Leu Val Asp Pro Ala Cys Ile Thr Ser Ile Gln Pro Gly Ala Pro  
 85 90 95

Lys Thr Ile Val Arg Gly Ser Lys Xaa Ala Lys Asp Gly Ala Leu Thr  
 100 105 110

Leu Leu Leu Asp Glu Phe Glu Asn Met Xaa Val Thr Arg  
 115 120 125

&lt;210&gt; 1156

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1156

Arg Pro Thr Arg Pro Gln Pro Ser Pro Asp Glu Ala Arg Pro Leu Gln  
 1 5 10 15

Ala Leu Leu Asp Gly Arg Gly Leu Cys Val Asn Ala Ser Ala Val Ser  
 20 25 30

Arg Leu Arg Ala Tyr Leu Leu Pro Ala Pro Pro Ala Pro Gly Asn Ala  
 35 40 45

Ser Glu Ser Glu Glu Asp Arg Ser Ala Gly Ser Val Glu Ser Pro Ser

1165

50		55		60
Val Ser Ser Thr His Arg	Val Ser Asp Pro Lys Phe His Pro Leu His			
65	70	75	80	
Ser Lys Ile Ile Ile Ile Lys Lys Gly His Ala Lys Asp Ser Gln Arg				
	85	90	95	
Tyr Lys Val Asp Tyr Glu Ser Gln Ser Thr Asp Thr Gln Asn Phe Ser				
	100	105	110	
Ser Glu Ser Lys Arg Glu Thr Glu Tyr Gly Pro Cys Arg Arg Glu Met				
	115	120	125	
Glu Asp Thr Leu Asn His Leu Lys Phe Leu Asn Val Leu Ser Pro Arg				
	130	135	140	
Gly Val His Ile Pro Asn Cys Asp Lys Lys Gly Phe Tyr Lys Lys Lys				
	145	150	155	160
Gln Cys Arg Pro Ser Lys Gly Arg Lys Arg Gly Phe Cys Trp Cys Val				
	165	170	175	
Asp Lys Tyr Gly Gln Pro Leu Pro Gly Tyr Thr Thr Lys Gly Lys Glu				
	180	185	190	
Asp Val His Cys Tyr Ser Met Gln Ser Lys				
	195	200		

&lt;210&gt; 1157

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1157

Arg Arg Cys Cys His Ser Ala Thr Met Phe Glu Ala Arg Leu Val Gln				
1	5	10	15	
Gly Ser Ile Leu Lys Lys Val Leu Glu Ala Leu Lys Asp Leu Ile Asn				
	20	25	30	
Glu Ala Cys Trp Asp Ile Ser Ser Ser Gly Val Asn Leu Gln Ser Met				
	35	40	45	
Asp Ser Ser His Val Ser Leu Val Gln Leu Thr Leu Arg Ser Glu Gly				
	50	55	60	
Phe Asp Thr Tyr Arg Cys Asp Arg Asn Leu Ala Met Gly Val Asn Leu				
	65	70	75	80

1166

Thr Ser Met Ser Lys Ile Leu Lys Cys Ala Gly Asn Glu Asp Ile Ile  
                     85                    90                    95  
 Thr Leu Arg Ala Glu Asp Asn Ala Asp Thr Leu Ala Leu Val Phe Glu  
                     100                    105                    110  
 Ala Pro Asn Gln Glu Lys Val Ser Asp Tyr Glu Met Lys Leu Met Asp  
                     115                    120                    125  
 Leu Asp Val Glu Gln Leu Gly Ile Pro Glu Gln Glu Tyr Ser Cys Val  
                     130                    135                    140  
 Val Lys Met Pro Ser Gly Glu Phe Ala Arg Ile Cys Arg Asp Leu Ser  
                     145                    150                    155                    160  
 His Ile Gly Asp Ala Val Val Ile Ser Cys Ala Lys Asp Gly Val Lys  
                     165                    170                    175  
 Phe Ser Ala Ser Gly Glu Leu Gly Asn Gly Asn Ile Lys Leu Ser Gln  
                     180                    185                    190  
 Thr Ser Asn Val Asp Lys Glu Glu Glu Ala Val Thr Ile Glu Met Asn  
                     195                    200                    205  
 Glu Pro Val Gln Leu Thr Phe Ala Leu Arg Tyr Leu Asn Phe Phe Thr  
                     210                    215                    220  
 Lys Ala Thr Pro Leu Ser Ser Thr Val Thr Leu Ser Met Ser Ala Asp  
                     225                    230                    235                    240  
 Val Pro Leu Val Val Glu Tyr Lys Ile Ala Asp Met Gly His Leu Lys  
                     245                    250                    255  
 Tyr Tyr Leu Ala Pro Lys Ile Glu Asp Glu Glu Gly Ser  
                     260                    265

&lt;210&gt; 1158

&lt;211&gt; 639

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (129)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE



1167

&lt;222&gt; (150)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1158

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Met Asp Glu Met Ala Thr Thr Gln Ile Ser Lys Asp Glu Leu Asp Glu
 1           5           10           15

Leu Lys Glu Ala Phe Ala Lys Val Asp Leu Asn Ser Asn Gly Phe Ile
          20           25           30

Cys Asp Tyr Glu Leu His Glu Leu Phe Lys Glu Ala Asn Met Pro Leu
          35           40           45

Pro Gly Tyr Lys Val Arg Glu Ile Ile Gln Lys Leu Met Leu Asp Gly
          50           55           60

Asp Arg Asn Lys Asp Gly Lys Ile Ser Phe Asp Glu Phe Val Tyr Ile
          65           70           75           80

Phe Gln Glu Val Lys Ser Ser Asp Ile Ala Lys Thr Phe Arg Lys Ala
          85           90           95

Ile Asn Arg Lys Glu Gly Ile Cys Ala Leu Gly Gly Thr Ser Glu Leu
          100          105          110

Ser Ser Glu Gly Thr Gln His Ser Tyr Ser Glu Glu Glu Lys Tyr Ala
          115          120          125

Xaa Val Asn Trp Ile Asn Lys Ala Leu Glu Asn Asp Pro Asp Cys Arg
          130          135          140

His Val Ile Pro Met Xaa Pro Asn Thr Asp Asp Leu Phe Lys Ala Val
          145          150          155          160

Gly Asp Gly Ile Val Leu Cys Lys Met Ile Asn Leu Ser Val Pro Asp
          165          170          175

Thr Ile Asp Glu Arg Ala Ile Asn Lys Lys Lys Leu Thr Pro Phe Ile
          180          185          190

Ile Gln Glu Asn Leu Asn Leu Ala Leu Asn Ser Ala Ser Ala Ile Gly
          195          200          205

Cys His Val Val Asn Ile Gly Ala Glu Asp Leu Arg Ala Gly Lys Pro
          210          215          220

His Leu Val Leu Gly Leu Leu Trp Gln Ile Ile Lys Ile Gly Leu Phe
          225          230          235          240

Ala Asp Ile Glu Leu Ser Arg Asn Glu Ala Leu Ala Ala Leu Leu Arg
          245          250          255

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1168

Asp Gly Glu Thr Leu Glu Glu Leu Met Lys Leu Ser Pro Glu Glu Leu  
 260 265 270

Leu Leu Arg Trp Ala Asn Phe His Leu Glu Asn Ser Gly Trp Gln Lys  
 275 280 285

Ile Asn Asn Phe Ser Ala Asp Ile Lys Leu Ile Asp Phe Ser Asn Ser  
 290 295 300

Val Lys Asp Ser Lys Ala Tyr Phe His Leu Leu Asn Gln Ile Ala Pro  
 305 310 315 320

Lys Gly Gln Lys Glu Gly Glu Pro Arg Ile Asp Ile Asn Met Ser Gly  
 325 330 335

Phe Asn Glu Thr Asp Asp Leu Lys Arg Ala Glu Ser Met Leu Gln Gln  
 340 345 350

Ala Asp Lys Leu Gly Cys Arg Gln Phe Val Thr Pro Ala Asp Val Val  
 355 360 365

Ser Gly Asn Pro Lys Leu Asn Leu Ala Phe Val Ala Asn Leu Phe Asn  
 370 375 380

Lys Tyr Pro Ala Leu Thr Lys Pro Glu Asn Gln Asp Ile Asp Trp Thr  
 385 390 395 400

Leu Leu Glu Gly Glu Thr Arg Glu Glu Arg Thr Phe Arg Asn Trp Met  
 405 410 415

Asn Ser Leu Gly Val Asn Pro His Val Asn His Leu Tyr Ala Asp Leu  
 420 425 430

Gln Asp Ala Leu Val Ile Leu Gln Leu Tyr Glu Arg Ile Lys Val Pro  
 435 440 445

Val Asp Trp Ser Lys Val Asn Lys Pro Pro Tyr Pro Lys Leu Gly Ala  
 450 455 460

Asn Met Lys Lys Leu Glu Asn Cys Asn Tyr Ala Val Glu Leu Gly Lys  
 465 470 475 480

His Pro Ala Lys Phe Ser Leu Val Gly Ile Gly Gly Gln Asp Leu Asn  
 485 490 495

Asp Gly Asn Gln Thr Leu Thr Leu Ala Leu Val Trp Gln Leu Met Arg  
 500 505 510

Arg Tyr Thr Leu Asn Val Leu Glu Asp Leu Gly Asp Gly Gln Lys Ala  
 515 520 525

1169

Asn Asp Asp Ile Ile Val Asn Trp Val Asn Arg Thr Leu Ser Glu Ala  
530 535 540

Gly Lys Ser Thr Ser Ile Gln Ser Phe Lys Asp Lys Thr Ile Ser Ser  
545 550 555 560

Ser Leu Ala Val Val Asp Leu Ile Asp Ala Ile Gln Pro Gly Cys Ile  
565 570 575

Asn Tyr Asp Leu Val Lys Ser Gly Asn Leu Thr Glu Asp Asp Lys His  
580 585 590

Asn Asn Ala Lys Tyr Ala Val Ser Met Ala Arg Arg Ile Gly Ala Arg  
595 600 605

Val Tyr Ala Leu Pro Glu Asp Leu Val Glu Val Lys Pro Lys Met Val  
610 615 620

Met Thr Val Phe Ala Cys Leu Met Gly Arg Gly Met Lys Arg Val  
625 630 635

<210> 1159  
<211> 63  
<212> PRT  
<213> Homo sapiens

<400> 1159  
Thr Ile Trp Pro Leu Asn Phe His Arg Lys Asn Asp Pro Thr Phe Leu  
1 5 10 15

Ser Met Ser Tyr Leu Ile Ser Arg Ser Trp Asp Gly Leu Thr Ile Leu  
20 25 30

Val Tyr Ile Leu Asp Thr Glu Arg Cys Tyr Ala Ser Val Ile Ile Pro  
35 40 45

Arg Leu Glu Ile Gly Arg Ala Lys Lys Val Leu Leu Phe Phe Leu  
50 55 60

<210> 1160  
<211> 207  
<212> PRT  
<213> Homo sapiens

<400> 1160  
Glu Val Tyr Gly Gly Ser Leu Asp Lys Glu Phe Asp Glu Ser Ser Pro

**1                      5                      10                      15**

His Asn Trp Lys Asn Val Glu Lys Ala Leu Glu Pro Phe Pro Val  
195 200 205

**<220>**

1171

&lt;221&gt; SITE

&lt;222&gt; (844)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1161

Ala Leu Gly Leu Gly Val Thr Met Ala Thr Glu Glu Phe Ile Ile Arg  
 1 5 10 15

Ile Pro Pro Tyr His Tyr Ile His Val Leu Asp Gln Asn Ser Asn Val  
 20 25 30

Ser Arg Val Glu Val Gly Pro Lys Thr Tyr Ile Arg Gln Asp Asn Glu  
 35 40 45

Arg Val Leu Phe Ala Pro Met Arg Met Val Thr Val Pro Pro Arg His  
 50 55 60

Tyr Cys Thr Val Ala Asn Pro Val Ser Arg Asp Ala Gln Gly Leu Val  
 65 70 75 80

Leu Phe Asp Val Thr Gly Gln Val Arg Leu Arg His Ala Asp Leu Glu  
 85 90 95

Ile Arg Leu Ala Gln Asp Pro Phe Pro Leu Tyr Pro Gly Glu Val Leu  
 100 105 110

Glu Lys Asp Ile Thr Pro Leu Gln Val Val Leu Pro Asn Thr Ala Leu  
 115 120 125

His Leu Lys Ala Leu Leu Asp Phe Glu Asp Lys Asp Gly Asp Lys Val  
 130 135 140

Val Ala Gly Asp Glu Trp Leu Phe Glu Gly Pro Gly Thr Tyr Ile Pro  
 145 150 155 160

Arg Lys Glu Val Glu Val Val Glu Ile Ile Gln Ala Thr Ile Ile Arg  
 165 170 175

Gln Asn Gln Ala Leu Arg Leu Arg Ala Arg Lys Glu Cys Trp Asp Arg  
 180 185 190

Asp Gly Lys Glu Arg Val Thr Gly Glu Glu Trp Leu Val Thr Thr Val  
 195 200 205

Gly Ala Tyr Leu Pro Ala Val Phe Glu Glu Val Leu Asp Leu Val Asp  
 210 215 220

Ala Val Ile Leu Thr Glu Lys Thr Ala Leu His Leu Arg Ala Arg Arg  
 225 230 235 240

Asn Phe Arg Asp Phe Arg Gly Val Ser Arg Arg Thr Gly Glu Glu Trp

1172

245	250	255
Leu Val Thr Val Gln Asp Thr Glu Ala His Val Pro Asp Val His Glu		
260	265	270
Glu Val Leu Gly Val Val Pro Ile Thr Thr Leu Gly Pro His Asn Tyr		
275	280	285
Cys Val Ile Leu Asp Pro Val Gly Pro Asp Gly Lys Asn Gln Leu Gly		
290	295	300
Gln Lys Arg Val Val Lys Gly Glu Lys Ser Phe Phe Leu Gln Pro Gly		
305	310	315
Glu Gln Leu Glu Gln Gly Ile Gln Asp Val Tyr Val Leu Ser Glu Gln		
325	330	335
Gln Gly Leu Leu Leu Arg Ala Leu Gln Pro Leu Glu Glu Gly Glu Asp		
340	345	350
Glu Glu Lys Val Ser His Gln Ala Gly Asp His Trp Leu Ile Arg Gly		
355	360	365
Pro Leu Glu Tyr Val Pro Ser Ala Lys Val Glu Val Val Glu Glu Arg		
370	375	380
Gln Ala Ile Pro Leu Asp Glu Asn Glu Gly Ile Tyr Val Gln Asp Val		
385	390	395
Lys Thr Gly Lys Val Arg Ala Val Ile Gly Ser Thr Tyr Met Leu Thr		
405	410	415
Gln Asp Glu Val Leu Trp Glu Lys Glu Leu Pro Pro Gly Val Glu Glu		
420	425	430
Leu Leu Asn Lys Gly Gln Asp Pro Leu Ala Asp Arg Gly Glu Lys Asp		
435	440	445
Thr Ala Lys Ser Leu Gln Pro Leu Ala Pro Arg Asn Lys Thr Arg Val		
450	455	460
Val Ser Tyr Arg Val Pro His Asn Ala Ala Val Gln Val Tyr Asp Tyr		
465	470	475
Arg Glu Lys Arg Ala Arg Val Val Phe Gly Pro Glu Leu Val Ser Leu		
485	490	495
Gly Pro Glu Glu Gln Phe Thr Val Leu Ser Leu Ser Ala Gly Arg Pro		
500	505	510
Lys Arg Pro His Ala Arg Arg Ala Leu Cys Leu Leu Leu Gly Pro Asp		

1173

515	520	525
Phe Phe Thr Asp Val Ile Thr Ile Glu Thr Ala Asp His Ala Arg Leu		
530	535	540
Gln Leu Gln Leu Ala Tyr Asn Trp His Phe Glu Val Asn Asp Arg Lys		
545	550	555 560
Asp Pro Gln Glu Thr Ala Lys Leu Phe Ser Val Pro Asp Phe Val Gly		
	565	570 575
Asp Ala Cys Lys Ala Ile Ala Ser Arg Val Arg Gly Ala Val Ala Ser		
	580	585 590
Val Thr Phe Asp Asp Phe His Lys Asn Ser Ala Arg Ile Ile Arg Thr		
	595	600 605
Ala Val Phe Gly Phe Glu Thr Ser Glu Ala Lys Gly Pro Asp Gly Met		
	610	615 620
Ala Leu Pro Arg Pro Arg Asp Gln Ala Val Phe Pro Gln Asn Gly Leu		
	625	630 635 640
Val Val Ser Ser Val Asp Val Gln Ser Val Glu Pro Val Asp Gln Arg		
	645	650 655
Thr Arg Asp Ala Leu Gln Arg Ser Val Gln Leu Ala Ile Glu Ile Thr		
	660	665 670
Thr Asn Ser Gln Glu Ala Ala Ala Lys His Glu Ala Gln Arg Leu Glu		
	675	680 685
Gln Glu Ala Arg Gly Arg Leu Glu Arg Gln Lys Ile Leu Asp Gln Ser		
	690	695 700
Glu Ala Glu Lys Ala Arg Lys Glu Leu Leu Glu Leu Glu Ala Leu Ser		
	705	710 715 720
Met Ala Val Glu Ser Thr Gly Thr Ala Lys Ala Glu Ala Glu Ser Arg		
	725	730 735
Ala Glu Ala Ala Arg Ile Glu Gly Glu Gly Ser Val Leu Gln Ala Lys		
	740	745 750
Leu Lys Ala Gln Ala Leu Ala Ile Glu Thr Glu Ala Glu Leu Gln Arg		
	755	760 765
Val Gln Lys Val Arg Glu Leu Glu Leu Val Tyr Ala Arg Ala Gln Leu		
	770	775 780
Glu Leu Glu Val Ser Lys Ala Gln Gln Leu Ala Glu Val Glu Val Lys		

[illegible]

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<400> 1162
Phe Xaa Val Gly Ile Val Asn Phe Ser Gln Pro Pro His Ala Ala Gly
 1             5             10             15
Glu Cys Gly Cys Ser Ser Ser Glu Met Leu Thr Xaa Lys Arg Glu Val
      20             25             30
Lys Gln Ser Arg Tyr Val Gln Pro Cys Leu Gln Asn Pro Ser Leu Ser
      35             40             45
Ser Leu Ile Arg Ser Phe Leu Val Phe Tyr
      50             55

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BNSDOCID: <WO\_\_0055350A1\_I\_>



1175

&lt;400&gt; 1163

Ile Pro Gly Ser Thr His Ala Ser Ala Gly Asn Leu Asp Ser Pro Glu  
 1 5 10 15

Gly Gly Phe Asp Ala Ile Met Gln Val Ala Val Cys Gly Ser Leu Ile  
 20 25 30

Gly Trp Arg Asn Val Thr Arg Leu Leu Val Phe Ser Thr Asp Ala Gly  
 35 40 45

Phe His Phe Ala Gly Asp Gly Lys Leu Gly Gly Ile Val Leu Pro Asn  
 50 55 60

Asp Gly Gln Cys His Leu Glu Asn Asn Met Tyr Thr Met Ser His Tyr  
 65 70 75 80

Tyr Asp Tyr Pro Ser Ile Ala His Leu Val Gln Lys Leu Ser Glu Asn  
 85 90 95

Asn Ile Gln Thr Ile Phe Ala Val Thr Glu Glu Phe Gln Pro Val Tyr  
 100 105 110

Lys Glu Leu Lys Asn Leu Ile Pro Lys Ser Ala Val Gly Thr Leu Ser  
 115 120 125

Ala Asn Ser Ser Asn Val Ile Gln Leu Ile Ile Asp Ala Tyr Asn Ser  
 130 135 140

Leu Ser Ser Glu Val Ile Leu Glu Asn Gly Lys Leu Ser Glu Gly Val  
 145 150 155 160

Thr Ile Ser Tyr Lys Ser Tyr Cys Lys Asn Gly Val Asn Gly Thr Gly  
 165 170 175

Glu Asn Gly Arg Lys Cys Ser Asn Ile Ser Ile Gly Asp Glu Val Gln  
 180 185 190

Phe Glu Ile Ser Ile Thr Ser Asn Lys Cys Pro Lys Lys Asp Ser Asp  
 195 200 205

Ser Phe Lys Ile Arg Pro Leu Gly Phe Thr Glu Glu Val Glu Val Ile  
 210 215 220

Leu Gln Tyr Ile Cys Glu Cys Glu Cys Gln Ser Glu Gly Ile Pro Glu  
 225 230 235 240

Ser Pro Lys Cys His Glu Gly Asn Gly Thr Phe Glu Cys Gly Ala Cys  
 245 250 255

Arg Cys Asn Glu Gly Arg Val Gly Arg His Cys Glu Cys Ser Thr Asp  
 260 265 270

1176

Glu Val Asn Ser Glu Asp Met Asp Ala Tyr Cys Arg Lys Glu Asn Ser  
 275 280 285

Ser Glu Ile Cys Ser Asn Asn Gly Glu Cys Val Cys Gly Gln Cys Val  
 290 295 300

Cys Arg Lys Arg Asp Asn Thr Asn Glu Ile Tyr Ser Gly Lys Phe Cys  
 305 310 315 320

Glu Cys Asp Asn Phe Asn Cys Asp Arg Ser Asn Gly Leu Ile Cys Gly  
 325 330 335

Gly Asn Gly Val Cys Lys Cys Arg Val Cys Glu Cys Asn Pro Asn Tyr  
 340 345 350

Thr Gly Ser Ala Cys Asp Cys Ser Leu Asp Thr Ser Thr Cys Glu Ala  
 355 360 365

Ser Asn Gly Gln Ile Cys Asn Gly Arg Gly Ile Cys Glu Cys Gly Val  
 370 375 380

Cys Lys Cys Thr Asp Pro Lys Phe Gln Gly Gln Thr Cys Glu Met Cys  
 385 390 395 400

Gln Thr Cys Leu Gly Val Cys Ala Glu His Lys Glu Cys Val Gln Cys  
 405 410 415

Arg Ala Phe Asn Lys Gly Glu Lys Lys Asp Thr Cys Thr Gln Glu Cys  
 420 425 430

Ser Tyr Phe Asn Ile Thr Lys Val Glu Ser Arg Asp Lys Leu Pro Gln  
 435 440 445

Pro Val Gln Pro Asp Pro Val Ser His Cys Lys Glu Lys Asp Val Asp  
 450 455 460

Asp Cys Trp Phe Tyr Phe Thr Tyr Ser Val Asn Gly Asn Asn Glu Val  
 465 470 475 480

Met Val His Val Val Glu Asn Pro Glu Cys Pro Thr Gly Pro Asp Ile  
 485 490 495

Ile Pro Ile Val Ala Gly Val Val Ala Gly Ile Val Leu Ile Gly Leu  
 500 505 510

Ala Leu Leu Leu Ile Trp Lys Leu Leu Met Ile Ile His Asp Arg Arg  
 515 520 525

Glu Phe Ala Lys Phe Glu Lys Glu Lys Met Asn Ala Lys Trp Asp Thr  
 530 535 540

1177

Gly Glu Asn Pro Ile Tyr Lys Ser Ala Val Thr Thr Val Val Asn Pro  
 545 550 555 560

Lys Tyr Glu Gly Lys  
 565

&lt;210&gt; 1164

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1164

Gly Thr Ala Gly Gly Ala Gly Gly Gln Arg Glu Val Arg Gly Cys Ser  
 1 5 10 15

Ala Gln Glu Thr Met Ser Gly Gly Ser Ser Cys Ser Gln Thr Pro Ser  
 20 25 30

Arg Ala Ile Pro Ala Thr Arg Arg Val Val Leu Gly Asp Gly Val Gln  
 35 40 45

Leu Pro Pro Gly Asp Tyr Ser Thr Thr Pro Gly Gly Thr Leu Phe Ser  
 50 55 60

Thr Thr Pro Gly Gly Thr Arg Ile Ile Tyr Asp Arg Lys Phe Leu Met  
 65 70 75 80

Glu Cys Arg Asn Ser Pro Val Thr Lys Thr Pro Pro Arg Asp Leu Pro  
 85 90 95

Thr Ile Pro Gly Val Thr Ser Pro Ser Ser Asp Glu Pro Pro Met Glu  
 100 105 110

Ala Ser Gln Ser His Leu Arg Asn Ser Pro Glu Asp Lys Arg Ala Gly  
 115 120 125

Gly Glu Glu Ser Gln Phe Glu Met Asp Ile  
 130 135

&lt;210&gt; 1165

&lt;211&gt; 407

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1165

Ala Ala Cys Gln Pro Arg Cys Cys Cys Ser Ser Cys Cys Gly Thr Ala

1178

1	5	10	15
Asp Arg Ala Ala Ala Pro Leu Ser Pro Leu Gln Ala Pro Ile Trp Ala	20	25	30
Pro Ala Thr Ser Met Asp Ala Arg Arg Val Pro Gln Lys Asp Leu Arg	35	40	45
Val Lys Lys Asn Leu Lys Lys Phe Arg Tyr Val Lys Leu Ile Ser Met	50	55	60
Glu Thr Ser Ser Ser Ser Asp Asp Ser Cys Asp Ser Phe Ala Ser Asp	65	70	75
Asn Phe Ala Asn Thr Arg Leu Gln Ser Val Arg Glu Gly Cys Arg Thr	85	90	95
Arg Ser Gln Cys Arg His Ser Gly Pro Leu Arg Val Ala Met Lys Phe	100	105	110
Pro Ala Arg Ser Thr Arg Gly Ala Thr Asn Lys Lys Ala Glu Ser Arg	115	120	125
Gln Pro Ser Glu Asn Ser Val Thr Asp Ser Asn Ser Asp Ser Glu Asp	130	135	140
Glu Ser Gly Met Asn Phe Leu Glu Lys Arg Ala Leu Asn Ile Lys Gln	145	150	155
Asn Lys Ala Met Leu Ala Lys Leu Met Ser Glu Leu Glu Ser Phe Pro	165	170	175
Gly Ser Phe Arg Gly Arg His Pro Leu Pro Gly Ser Asp Ser Gln Ser	180	185	190
Arg Arg Pro Arg Arg Arg Thr Phe Pro Gly Val Ala Ser Arg Arg Asn	195	200	205
Pro Glu Arg Arg Ala Arg Pro Leu Thr Arg Ser Arg Ser Arg Ile Leu	210	215	220
Gly Ser Leu Asp Ala Leu Pro Met Glu Glu Glu Glu Glu Glu Asp Lys	225	230	235
Tyr Met Leu Val Arg Lys Arg Lys Thr Val Asp Gly Tyr Met Asn Glu	245	250	255
Asp Asp Leu Pro Arg Ser Arg Arg Ser Arg Ser Ser Val Thr Leu Pro	260	265	270
His Ile Ile Arg Pro Val Glu Glu Ile Thr Glu Glu Glu Leu Glu Asn			

1179

275 280 285

Val Cys Ser Asn Ser Arg Glu Lys Ile Tyr Asn Arg Ser Leu Gly Ser  
290 295 300

Thr Cys His Gln Cys Arg Gln Lys Thr Ile Asp Thr Lys Thr Asn Cys  
305 310 315 320

Arg Asn Pro Asp Cys Trp Gly Val Arg Gly Gln Phe Cys Gly Pro Cys  
325 330 335

Leu Arg Asn Arg Tyr Gly Glu Glu Val Arg Asp Ala Leu Leu Asp Pro  
340 345 350

Asn Trp His Cys Pro Pro Cys Arg Gly Ile Cys Asn Cys Ser Phe Cys  
355 360 365

Arg Gln Arg Asp Gly Arg Cys Ala Thr Gly Val Leu Val Tyr Leu Ala  
370 375 380

Lys Tyr His Gly Phe Gly Asn Val His Ala Tyr Leu Lys Ser Leu Lys  
385 390 395 400

Gln Glu Phe Glu Met Gln Ala  
405

&lt;210&gt; 1166

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (197)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (201)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (202)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (219)

1180

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1166

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Pro Asp Gly Arg Pro Thr Gly Asp Ala Phe Val Leu Phe Ala Cys Glu
 1           5           10           15

Glu Tyr Ala Gln Asn Ala Leu Arg Lys His Lys Asp Leu Leu Gly Lys
          20           25           30

Arg Tyr Ile Glu Leu Phe Arg Ser Thr Ala Ala Glu Val Gln Gln Val
 35           40           45

Leu Asn Arg Phe Ser Ser Ala Pro Leu Ile Pro Leu Pro Thr Pro Pro
 50           55           60

Ile Ile Pro Val Leu Pro Gln Gln Phe Val Pro Pro Thr Asn Val Arg
 65           70           75           80

Asp Cys Ile Arg Leu Arg Gly Leu Pro Tyr Ala Ala Thr Ile Glu Asp
          85           90           95

Ile Leu Asp Phe Leu Gly Glu Phe Ala Thr Asp Ile Arg Thr His Gly
          100          105          110

Val His Met Val Leu Asn His Gln Gly Arg Pro Ser Gly Asp Ala Phe
          115          120          125

Ile Gln Met Lys Ser Ala Asp Arg Ala Phe Met Ala Ala Gln Lys Cys
          130          135          140

His Lys Lys Asn Met Lys Asp Arg Tyr Val Glu Val Phe Gln Cys Ser
          145          150          155          160

Ala Glu Glu Met Asn Phe Val Leu Met Gly Gly Thr Leu Asn Arg Asn
          165          170          175

Gly Leu Ser Pro Pro Pro Cys Leu Ser Pro Pro Ser Tyr Thr Phe Pro
          180          185          190

Ala Pro Ala Ala Xaa Ile Pro Thr Xaa Xaa Ala Ile Tyr Gln Pro Ser
          195          200          205

Val Ile Leu Asn Pro Arg Ala Leu Gln Pro Xaa Thr Ala Tyr Tyr Pro
          210          215          220

Ala Gly Thr Gln Leu Phe Met Asn Tyr Thr Ala Tyr Tyr Pro Ser Val
          225          230          235          240

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